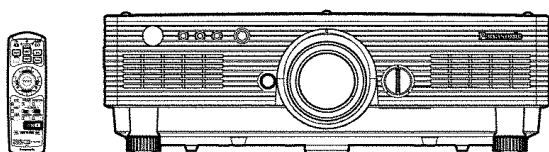


# Service Manual

DLP™ Based Projector



**PT-D5600U**

**PT-D5600E**

**PT-D5600UL**

**PT-D5600EL**

**PT-DW5000U**

**PT-DW5000E**

**PT-DW5000UL**

**PT-DW5000EL**

**Panasonic**

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The service technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this service manual.

## ⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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## CAUTION

### Lithium Battery

**Risk of explosion if battery is replaced by an incorrect type. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.**

(See also Operating Instructions.)

## Precaution

If using of this projector at high elevations (above 1 400 m), set FAN CONTROL1 to HIGHLAND.

Failure to observe this may cause malfunctions.

Never use this projector at an elevation of 2 700 m or higher.

Using this projector at high elevations, consult your dealer or Authorized Service Center about preparations.

## About lead free solder (PbF)

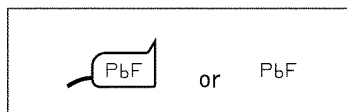
This projector is using the P.C.Board which applies lead free solder. The use of lead free solder is recommended from the standpoint of antipollution for the global environment in service.

Notes:

- Lead free solder: Sn-Ag-Cu (tin, silver and copper) has a higher melting point (approx. 217°C) than standard solder. Typically, the melting point is 30°C to 40°C higher. When servicing, use a high temperature soldering iron with temperature limitation function and set it to 370±10°C.
- Be precautions about lead free solder: Sn-Ag-Cu (tin, silver and copper) will tend to splash when heated too high (approx. 600°C or higher).
- Use lead free solder for the P.C.Board (specified on it as "PbF") which uses lead free solder. (When you unavoidably use lead solder, use lead solder after removing lead free solder. Or be sure to heat the lead free solder until it melts completely, before applying lead solder.)
- After soldering to double layered P.C.Boards, check the component side for excess solder which may flow onto the opposite side.

About the identification of the lead free solder P.C.Board

For the P.C.Board which applies lead free solder, the symbol as shown in the figure below is printed or stamped on the surface or the back of P.C.Board.



For US

## IMPORTANT SAFETY NOTICE

There are special parts used in Panasonic LCD Projectors which are important for safety. These parts are shaded on the schematic diagram. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of PANASONIC BROADCAST & TELEVISION SYSTEMS COMPANY.

## WARNING:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Any unauthorized changes or modifications to this equipment will void the users authority to operate.



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# 1 Safety Precautions

## 1.1. General Guidelines

- For continued safety, no modification of any circuit must be attempted.
- Unplug the power cord from the power outlet before disassembling this projector.
- Use correctly the supplied power cord and must ground it.
- It is advisable to use an isolation transformer in the AC power line before the service.
- Be careful not to touch the rotation part (cooling fan, etc.) of this projector when you service with the upper case removed and the power supply turned ON.
- Observe the original lead dress during the service. If a short circuit is found, replace all the parts overheated or damaged by the short circuit.
- After the service, all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations must be properly installed.
- After the service, check the leakage current to prevent the customer from getting an electric shock.

## 1.2. Leakage Current Check

1. Prepare the measuring circuit as shown in Fig.1.

Be sure to use a voltmeter having the performance described in Table 1.

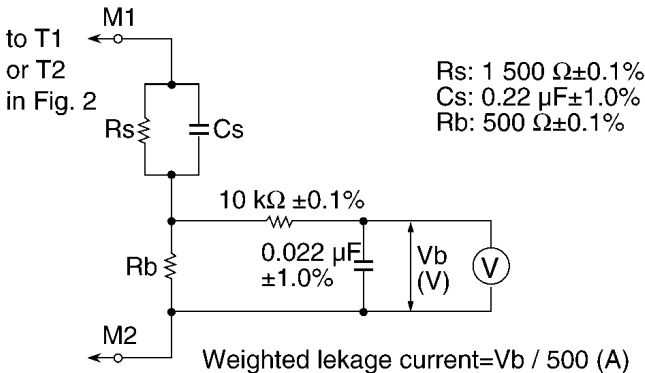


Fig. 1

	Performance
Voltmeter (rms reading)	Accuracy: $\leq 2\%$ Input resistance: $\geq 1 \text{ M}\Omega$ Input capacitance: $\leq 200 \text{ pF}$ Frequency range: 15 Hz to 1 MHz

Table 1

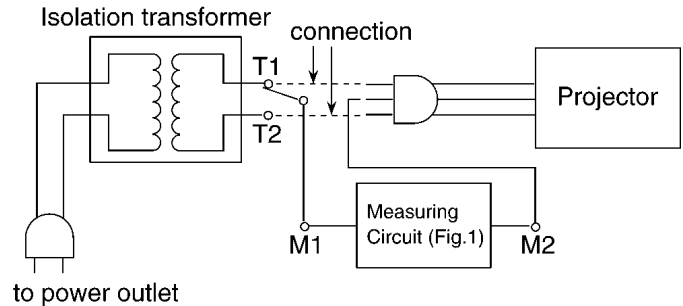


Fig. 2

2. Assemble the circuit as shown in Fig. 2. Plug the power cord in a power outlet.
3. Connect M1 to T1 according to Fig. 2 and measure the voltage.
4. Change the connection of M1 from T1 to T2 and measure the voltage again.
5. The voltmeter must read 0.375 V or lower in both of steps 3 and 4. This means that the current must be 0.75 mA or less.
6. If the reading is out of the above standard, the projector must be repaired and rechecked before returning to the customer because of a possibility of an electric shock.

## 1.3. UV Precaution and UHM Lamp Precautions

- Be sure to unplug the power cord from the power outlet when replacing the lamp.
- Because the lamp reaches a very high temperature during its operation, wait until it cools completely when replacing the Lamp Unit.
- The lamp emits small amounts of UV-radiation, avoid direct-eye contact with the light.
- The lamp unit has high internal pressure. If improperly handled, explosion might result.

## 2 Specifications

Model No.	PT-D5600U/E	PT-D5600UL/EL	PT-DW5000U/E	PT-DW5000UL/EL
Power supply	AC 120 V, 50 Hz/60 Hz (D5600U/UL, DW5000U/UL) AC 220 V-240 V, 50 Hz/60 Hz (D5600E/EL, DW5000E/EL)			
Power consumption	770 W (about 10 W in standby without fan running): (D5600U/UL, DW5000U/UL) 750 W (about 15 W in standby without fan running): (D5600E/EL, DW5000E/EL)			
DLP™ panel				
Panel size	0.7 inch (aspect ratio 4:3)		0.65 inch (aspect ratio 15:9)	
Display system	DMD™ element, DLP™ type			
Number of pixels	786 432 pixels (1 024 x 768 dots)		983 040 pixels (1 280 x 768 dots)	
Lens				
Powered zoom	1 to 1.32	Option	1 to 1.32	Option
Powered focus control	F=1.7 to 2.0 f=25.6 mm to 33.8 mm		F=1.7 to 2.0 f=25.6 mm to 33.8 mm	
Projection lamp	2 bulbs x 300 W UHM lamp			
Optical output	5 000 lm*1		4 500 lm*1	
Applicable scanning frequency				
For video signal (S-video included)	Horizontally 15.73 kHz/15.63 kHz, vertically 59.94 Hz/50 Hz			
For RGB signal	Horizontally 15 kHz-91 kHz, vertically 50 Hz-85 Hz, Panasonic Intelligent Auto Scanning (PIAS) system Dot clock frequency Less than 108 MHz Compliant with HDCP*2			
For DVI-D signal	EDID1: 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i EDID2: VGA60, SVGA60, XGA50, XGA60, XGA70, XGA85, WXGA768/50, WXGA768/60, SXGA60			
For YPbPr signal	[480i], horizontally 15.73 kHz, vertically 59.94 Hz [480p], horizontally 31.5 kHz, vertically 59.94 Hz [576i], horizontally 15.63 kHz, vertically 50 Hz [576p], horizontally 31.25 kHz, vertically 50 Hz [720/60p], horizontally 45 kHz, vertically 60 Hz [720/50p], horizontally 37.5 kHz, vertically 50 Hz [1035/60i], horizontally 33.75 kHz, vertically 60 Hz [1080/60i], horizontally 33.75 kHz, vertically 60 Hz [1080/50i], horizontally 28.13 kHz, vertically 50 Hz • HD/SYNC, VD terminals are not compliant with 3 value composite SYNC.			
Color system	7 standards (NTSC/NTSC4.43/PAL/PAN-N/PAL-M/SECAM/PAL60)			
Screen size	50 inch - 600 inch			
Screen aspect ratio	4:3		15:9	
Projection scheme	Menu-selectable from front/rear/ceiling mount, and floor standing			
Contrast ratio	2 000:1 (when "HIGH" is selected as the "CONTRAST MODE" setting)			
Interface ports				
RGB1 input terminal	1 set, BNC x 5 [For YPbPr input] Y: 1.0 V[p-p] synchronization signal included, PbPr: 0.7 V[p-p] 75 Ω [For RGB input] 0.7 V[p-p] 75 Ω For G-SYNC: 1.0 V[p-p] 75 Ω HD/SYNC: TTL, high-impedance, positive/negative polarity automatically adjusted VD: TTL, high-impedance, positive/negative polarity automatically adjusted • However, HD/SYNC, and VD terminals are not compliant with 3-value direct SYNC.			

\*1 These values are for the lens provided with the PT-D5600\*\*/DW5000\*\*. Note that these values change according to the lens used.

\*2 HDCP (High-bandwidth Digital Content Protection)

HDCP is digital video signal encryption system developed with the aim of protecting digital content.

Model No.	PT-D5600U/E	PT-D5600UL/EL	PT-DW5000U/E	PT-DW5000UL/EL
Interface ports				
RGB2 input terminal	1 set of high-density, D-sub 15p (female) [For YPbPr input] Y: 1.0 V [p-p] synchronization signal included, PbPr: 0.7 V[p-p] 75 Ω [For RGB input] 0.7 V[p-p] 75 Ω For G-SYNC: 1.0 V[p-p] 75 Ω HD/SYNC: TTL, high-impedance, positive/negative polarity automatically adjusted VD: TTL, high-impedance, positive/negative polarity automatically adjusted • However, HD/SYNC, and VD terminals are not compliant with 3-value direct SYNC.			
Video input terminal	1 set BNC			
S-video input terminal	1.0 V[p-p] 75 Ω			
Serial input/output terminal	1 set Mini DIN 4p			
Remote1 input/output terminal	Y 1.0 V[p-p] C 0.286 V[p-p] 75 Ω Compliant with S1 signals			
Remote2 terminal	D-sub 9-pin (male/female), RS232C compliant			
DVI-D terminal	Used for personal computer control			
LAN terminal	1 set each for M3 stereo mini jack			
	Wired remote control, used for link control			
	D-sub 9-pin (female)			
	Used for external control			
	DVI-D 24-pin Signal link, compatible with HDCP			
	RJ-45 Compliant with PLink™			
Length of power supply cord	3.0 m			
Cabinet	Molded resin			
Outside dimensions	Width: 530 mm ; Height : 167 mm; Depth: 425 mm			
Mass	14.5 kg	14.0 kg	14.5 kg	14.0 kg
Working environment condition	*3 Ambient temperature: 0 to 45°C Ambient humidity: 20 to 80% (no condensation)			
Remote control				
Power source	3 V DC (two AAA dry cells)			
Operation range	approx. 7 m (in front of beam receiver)			
Mass	95 g (including dry cells)			
Outside dimensions	Width: 45 mm, Thickness: 23 mm , Depth: 145 mm			
Option				
Hanging attachment (For high ceiling)	: ET-PKD55			
Hanging attachment (For low ceiling)	: ET-PKD55S			
Projection lens	: PT-D5600U/UL, PT-D5600E/EL ET-DLE100, ET-DLE200, ET-DLE300, ET-DLE310, ET-DLE400 ET-DLE410, ET-DLE050 PT-DW5000U/UL, PT-DW5000E/EL ET-DLE100, ET-DLE200, ET-DLE310, ET-DLE410, ET-DLE050			
Wireless mouse receiver	: ET-RMRC2			
Replacement lamp unit	: ET-LAD55 (single bulb), ET-LAD55W (double bulbs)			
Long life lamp unit	: ET-LAD55L (single bulb), ET-LAD55LW (double bulbs)			

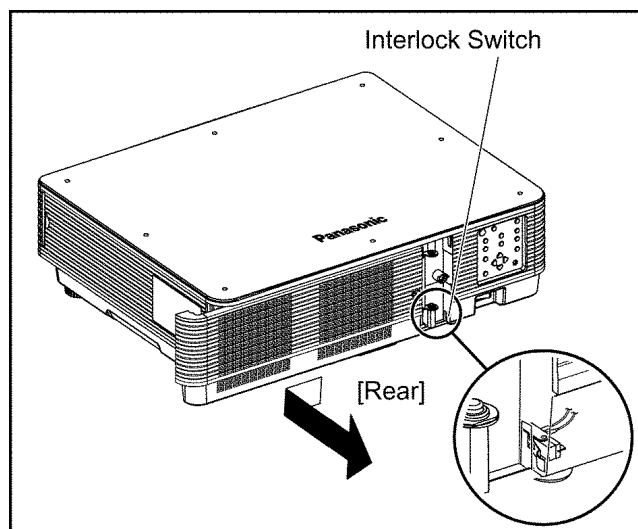
• The outside dimensions do not include the lens and other protruding parts.

\*3 When using the projector at high altitudes (1 400 to 2 700 m), the upper limit for the ambient temperature drops by 5 °C.

## 3 Function for Safety

### 3.1. Interlock Switch

To ensure safety, the protection circuit of the main unit functions, and this projector becomes operation halt condition (a part of circuit is energizing) when the lamp unit cover is removed or installed incorrectly.

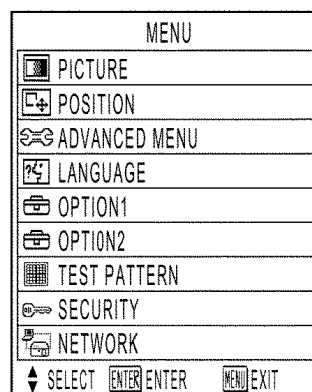


## 4 Serviceman Mode

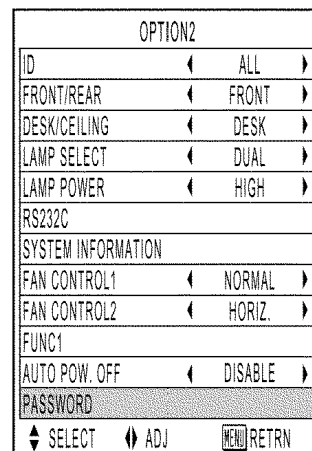
This projector has Serviceman Mode in addition to standard on-screen menus (User Mode).

### 4.1. Setting to Serviceman Mode

- (1) Press the MENU button.  
The MENU screen will appear.



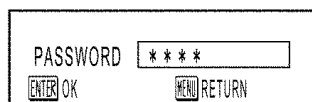
- (2) Select "OPTION2" using the ▲ or ▼ buttons and press the ENTER button.  
The OPTION2 screen will appear.
- (3) Select "PASSWORD" using the ▲ or ▼ buttons and press the ENTER button.  
The PASSWORD screen will appear.



- (4) Set the operation mode selector (Computer/Numeric, Projector) switch to "Computer/Numeric" on the remote control unit and input the password "1565".

**Note:**

- Asterisk (\*) will appear for the password numbers.



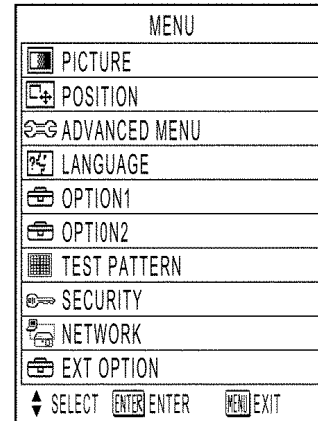
- (5) Set the operation mode selector (Computer/Numeric, Projector) switch to "Projector" on the remote control unit and press the ENTER button.

- (6) Press the MENU button.

**Note:**

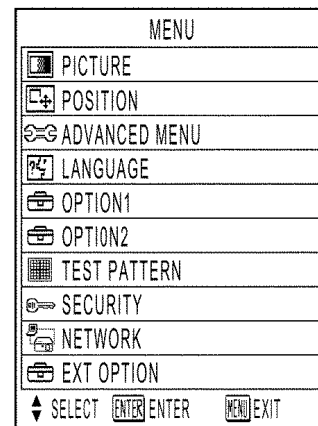
- "SERVICEMAN" will appear.

SERVICEMAN

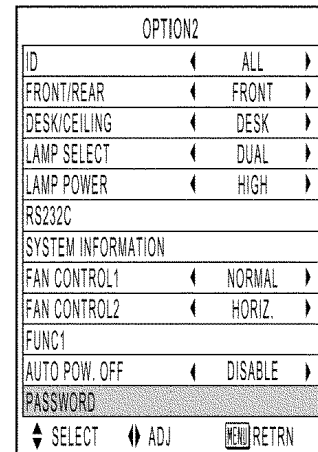


## 4.2. Resetting to User Mode

- (1) Press the MENU button.  
The MENU screen will appear.



- (2) Select "OPTION2" using the ▲ or ▼ buttons and press the ENTER button.  
The OPTION2 screen will appear.



- (3) Select PASSWORD using the ▲ or ▼ buttons and press the ENTER button.  
The PASSWORD screen will appear.

- (4) Set the operation mode selector (Computer/Numeric, Projector) switch to "Computer/Numeric" on the remote control unit and input the password "0000".

**Note:**

- Asterisk (\*) will appear for the password numbers.

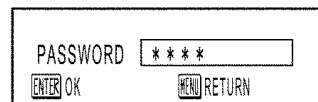
- (5) Set the operation mode selector (Computer/Numeric, Projector) switch to "Projector" on the remote control unit and press the ENTER button.

- (6) Press the MENU button.

**Note:**

- "USER" will appear.


USER



## 4.3. Functions in Serviceman Mode

### 4.3.1. EXT OPTION

"EXT OPTION" is added to the MENU.

EXT OPTION	
CUT OFF	
LAMP RELAY	◀ 22h ▶
ADJUST DATE	
LAMP DUAL24h	◀ OFF ▶
SELF CHECK	
CW INDEX	511
P. ON SHUTTER	◀ OPEN ▶
P. OffSHUTTER	◀ IGNORE ▶
ERROR OSD	◀ OFF ▶
H. MASK PULSE (STANDARD)	
SIGNAL DATA ALL ERASE	
OUTPUT RESO	◀ WXGA ▶
▲ SELECT    ▬ ADJ  RETRN	

#### 1. CUT OFF

Sets the display ON/OFF for each color (R, G, B).

#### 2. LAMP RELAY

"OFF", "4h", "5h", "6h" . . . "20h", "21h", "22h":

If "SINGLE" is set on LAMP SELECT, Lamp Unit 1 and Lamp Unit 2 are automatically switched alternately at intervals of the selected setting time (for 4-22 hours).

#### 3. ADJUST DATE

Sets the time zone and date.

#### 4. LAMP DUAL24h

When LAMP SELECT is DUAL, lights only one lamp for four hours from the specified time.

#### 5. SELF CHECK

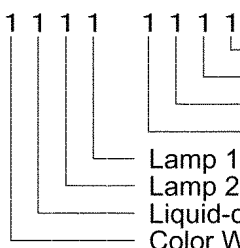
Displays SELF CHECK.

There are 4 pages, and it is switched with ◀ and ▶ buttons.

[1st page]

## SELF CHECK 1/4

①	SELF CHECK1/4	
②	MAIN: R1.00.00	
③	FPGA: R1.00.00	
④	NETWORK: R1.00.00	
⑤	DDP: 02 25 29	
⑥	OK AIR TEMP.027	
⑦	OK DMD TEMP.050	
⑧	OK OUT TEMP.033	
⑨	OK AIRFLOW 220/208	
⑩	OK LAMP1 0000H00M ON	⑩
⑪	NG LAMP2 0000H00M OFF	⑪
⑫	OK FAN 1111 1111	⑫
⑬	OK COLOR WHEEL	
⑭	OK DIRECT POWER OFF	
⑮	OK SHUTTER 12345	⑮

	Display Contents	Remarks
①	Page No.	
②	Main CPU Version Display	
③	FPGA Version Display	
④	Network CPU Version Display	
⑤	DDP Version Display	
⑥	Intake Air Temperature	Celsius display
⑦	DMD Temperature	Celsius display
⑧	Exhaust Air Temperature	Celsius display
⑨	Airflow Sensor (Current airflow value / Required airflow value)	NG means the air filter may accumulate dust.
⑩	Lamp Unit 1 Abnormality Check	OK: Normal
⑪	Lamp Unit 2 Abnormality Check	NG: Lighting failure
⑫	Fan Abnormality Check	OK: Normal NG: Stop
⑬	Color Wheel Abnormality Check	OK: Normal NG: Stop
⑭	Direct Power-off Circuit Abnormality Check	OK: Normal NG: Circuit unconnection
⑮	Shutter Abnormality Check	OK: Normal NG: abnormality
⑯	Lamp Unit 1 Cumulative Usage Time State of Lighting	Cumulative usage time: Conversion time
⑰	Lamp Unit 2 Cumulative Usage Time State of Lighting	ON: Lighting OFF: Turning off
⑱	Fan Individual Abnormality Check  	1: Normal 0: Stop Lamp 2 Exhaust Fan Lamp 1 Exhaust Fan Power Fan Ballast Fan Lamp 1 Intake Fan Lamp 2 Intake Fan Liquid-cooled Pump Color Wheel Fan
⑲	Shutter Operation Times	It is reset when STD button on the remote control unit is pressed 3 seconds or longer.



[2nd page]

## SELF CHECK 2/4

①	SELF CHECK2/4
②	1080/60i
③	H 33.61kHz
④	V 59.93Hz

	Display Contents	Remarks
①	Page No.	
②	Signal Discrimination: Signal Name	
③	Horizontal Frequency	Not displayed when Video or S-video
④	Vertical Frequency	

[3rd page]

## SELF CHECK 3/4

①	SELF CHECK3/4
②	LAMP1 LAD55:
③	RESET 0
④	RUNTIME [-1] 0H
⑤	RUNTIME [-2] 0H
⑥	RUNTIME [-3] 0H
⑦	RUNTIME [-4] 0H
⑧	LAMP1 LAD55L:
⑨	RESET 0
⑩	RUNTIME [-1] 0H
⑪	RUNTIME [-2] 0H
⑫	RUNTIME [-3] 0H
⑬	RUNTIME [-4] 0H

	Display Contents	Remarks
①	Page No.	
②	Lamp Unit 1 Normal Lamp	
③	Cumulative Usage Time	Reset Times
④		One time of reset
⑤		Two times of reset
⑥		Three times of reset
⑦		Four times of reset
⑧	Lamp Unit 1 Long Life Lamp	
⑨	Cumulative Usage Time	Reset Times
⑩		One time of reset
⑪		Two times of reset
⑫		Three times of reset
⑬		Four times of reset

[4th page]

## SELF CHECK 4/4

①	SELF CHECK4/4
②	LAMP2 LAD55:
③	RESET 0
④	RUNTIME [-1] 0H
⑤	RUNTIME [-2] 0H
⑥	RUNTIME [-3] 0H
⑦	RUNTIME [-4] 0H
⑧	LAMP2 LAD55L:
⑨	RESET 0
⑩	RUNTIME [-1] 0H
⑪	RUNTIME [-2] 0H
⑫	RUNTIME [-3] 0H
⑬	RUNTIME [-4] 0H

	Display Contents	Remarks
①	Page No.	
②	Lamp Unit 2 Normal Lamp	
③	Cumulative Usage Time	Reset Times
④		One time of reset
⑤		Two times of reset
⑥		Three times of reset
⑦		Four times of reset
⑧	Lamp Unit 2 Long Life Lamp	
⑨	Cumulative Usage Time	Reset Times
⑩		One time of reset
⑪		Two times of reset
⑫		Three times of reset
⑬		Four times of reset

## 6. CW INDEX

When the color wheel is replaced, adjusts it with ◀ and ▶ buttons.

- Display the test pattern 9 (Red & Blue pattern).
- Confirm whether there is a horizontal line.

- c. If a horizontal line is in the red area, decrease CW INDEX setting value by 1, and record the value where the horizontal line (in both red area and blue area) disappears. (The recorded value is assumed to "A".)
- d. If a horizontal line is in the blue area, increase CW INDEX setting value by 1, and record the value where the horizontal line (in both red area and blue area) disappears. (The recorded value is assumed to "B".)
- e. Set the mean value (omission below decimal point) of "A" and "B" to the CW INDEX setting value.



#### 7. P. ON SHUTTER

- Open: Opens the shutter when power ON.
- Close: Closes the shutter when power ON.

#### 8. P. OffSHUTTER

- IGNORE: Does not control the shutter when power OFF.
- Open: Opens the shutter when power OFF.
- Close: Closes the shutter when power OFF.

#### 9. ERROR OSD

Displays the lamp status with OSD when you do not see the status LED lights because the rear projection, etc.

OSD	OFF		ON	
ERROR OSD	OFF	ON	OFF	ON
To the shutdown within 200 hours	No OSD display		"REPLACE LAMP" is displayed for 30 seconds or until any key is pressed.	
Excess to the shutdown time	No OSD display		"REPLACE LAMP" is displayed until any key is pressed.	
Lighting failure	No OSD display		No OSD display	"LAMP1 ERROR" or "LAMP2 ERROR" is displayed until any key is pressed.
Lamp burn-out	No OSD display		No OSD display	"LAMP1 ERROR" or "LAMP2 ERROR" is displayed until any key is pressed.

#### 10. H.MASK PULSE

When the signal of 480i or 576i is inputted, the synchronization might become unstable. It might be stable when H.MASK PULSE is set to "SPECIAL".

- STANDARD: Does not execute special signal processing.
- SPECIAL: Executes special signal processing.

#### 11. SIGNAL DATA ALL ERASE

Resets the setting value of each signal to the initial value of the factory shipment.

#### 12. OUTPUT RESO

Sets OUTPUT RESO as below if the A-P.C.Board is replaced.

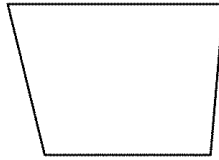
- D5600\*: XGA
- DW5000\*: WXGA

### 4.3.2. SUB-KEYSTONE

"SUB-KEYSTONE" is added to KEYSTONE in the "POSITION" menu.

If KEYSTONE and "Lens shift" are used at the same time, the right and left may be corrected in the unbalance.

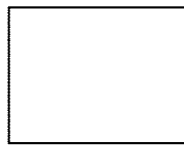
At this time, only the right side can be corrected by SUB-KEYSTONE.



1. The left side is adjusted straight by KEYSTONE.



2. The right side is adjusted straight by SUB-KEYSTONE.



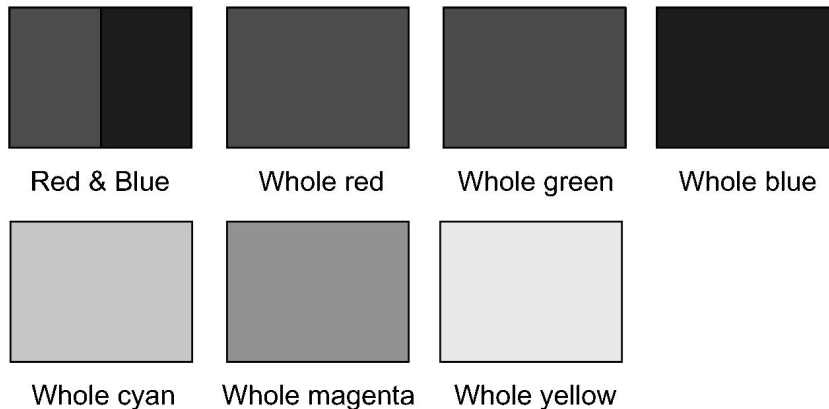
**Note:**

- SUB-KEYSTONE is a supplementary adjustment function and there is no guaranty of completely functioning. Use it within the range where the trouble such as deforming the shape of the image does not occur.

### 4.3.3. Test Pattern Addition

"Red & Blue", "Whole red", "Whole green", "Whole blue", "Whole cyan", "Whole magenta" and "Whole yellow" patterns are added to the test pattern.

"Red & Blue" is used for CW INDEX adjustment.



### 4.3.4. Ye MODULATE Addition

When the PICTURE menu is displayed, it is enabled to be adjusted with the ENTER button.

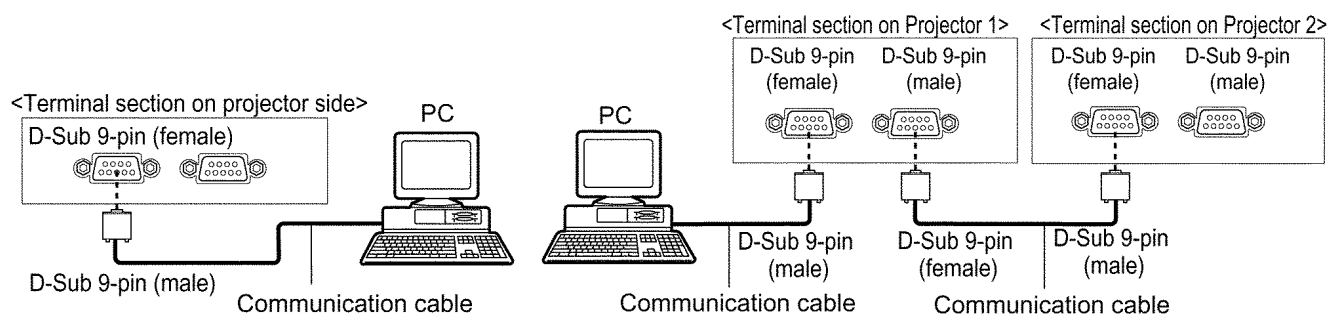
### 4.3.5. FRAME LOCK

When the input signal is RGB, FRAME LOCK is added to the POSITION menu.

## 5 Using the Serial Terminals

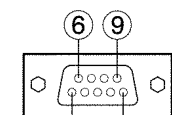
SERIAL terminals which are on the side-mounted connection terminals conform to RS-232C standard. This projector can be controlled by a PC which is connected as shown below. Also SERIAL OUT terminal is provided to enable plural projector control.

### 5.1. Examples of Connection



### 5.2. Pin Assignments and Signal Names

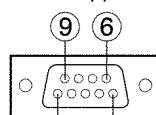
D-Sub 9-pin (female),  
external appearance



Serial input terminal

Pin No.	Signal name	Description
①		NC
②	TXD	Send data
③	RXD	Receive data
④		Connected internally
⑤	GND	Ground
⑥		NC
⑦	CTS	Connected internally
⑧	RTS	
⑨		NC

D-Sub 9-pin (male),  
external appearance



Serial output terminal

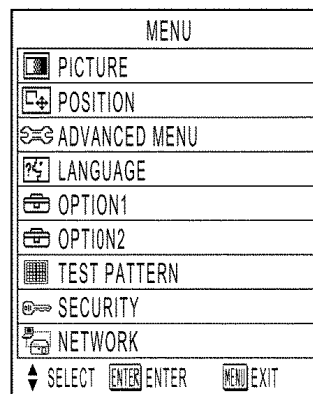
Pin No.	Signal name	Description
①		NC
②	RXD	Receive data
③	TXD	Send data
④		NC
⑤	GND	Ground
⑥		NC
⑦	RTS	Connected internally
⑧	CTS	
⑨		NC

### 5.3. Communication Conditions (Factory Setting)

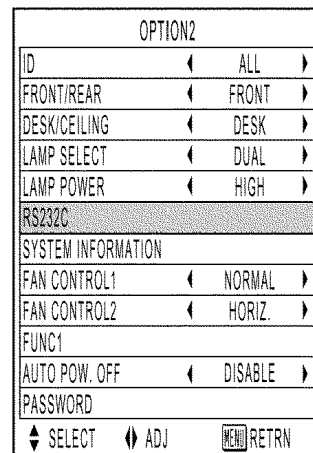
Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	9 600bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

## 5.4. Procedure of Communication Condition Settings

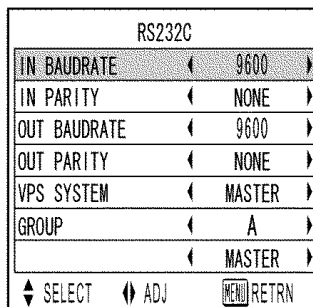
- (1) Press the MENU button.  
The MAIN MENU screen will be displayed.
- (2) Press the ▲ and ▼ buttons to select "OPTION2".



- (3) Press the ENTER button.
- (4) Press the ▲ and ▼ buttons to select "RS232C".



- (5) Press the ENTER button.  
The RS232C screen will be displayed.
- (6) Press the ▲ and ▼ buttons to select communication conditions.
- (7) Press the ◀ and ▶ buttons to confirm the setting..
- (8) Press the MENU button three times.  
The on-screen indications disappear, and the system returns to the normal screen.



## 5.5. Control commands

PrintDB  
Refer to "Control Commands".

## 5.6. Cable specifications

<Connecting to a PC>

Projector		Computer (DTE specifications)	
1	NC	NC	1
2			2
3			3
4			4
5	NC	NC	5
6	NC	NC	6
7			7
8			8
9	NC	NC	9

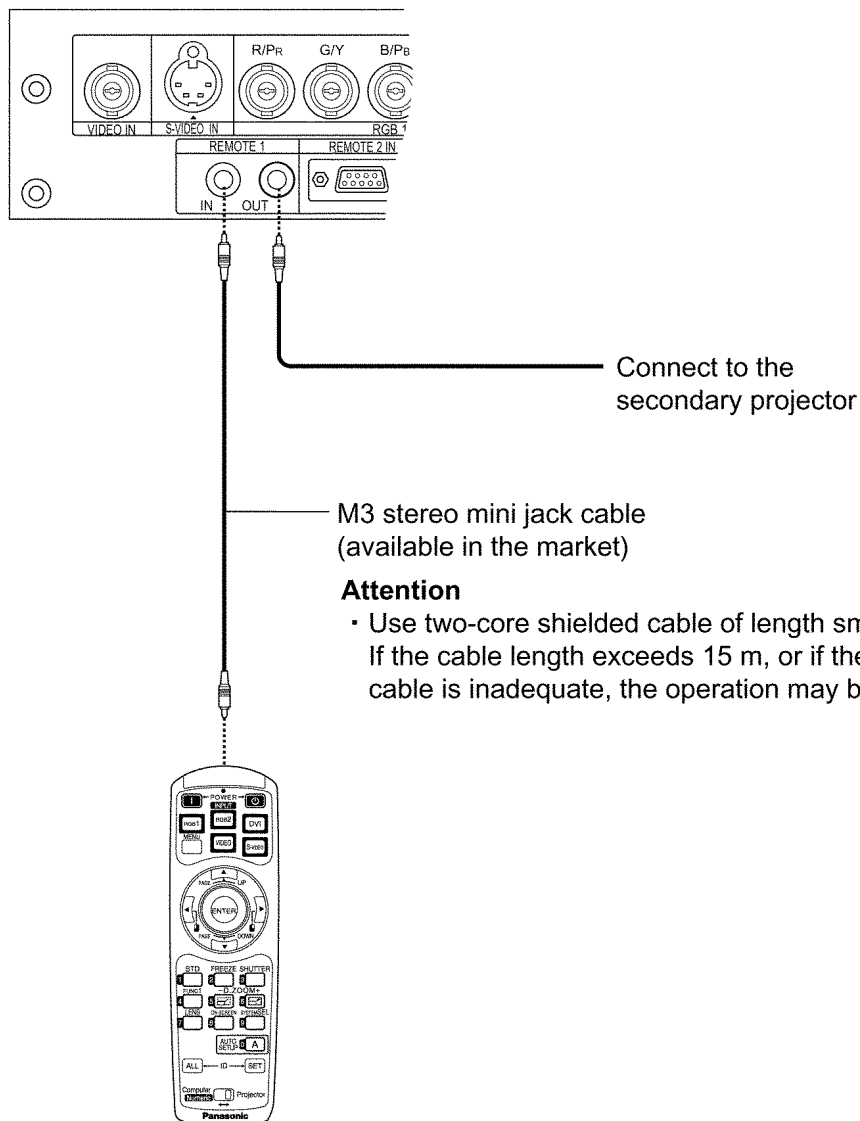
### Note

To connect the computer to the SERIAL terminal, prepare an adequate communication cable that fits to your personal computer.

## 6 Using a Wired Remote Control

### 6.1. Connection Example

When multiple main units are connected in the system, connect the units with the M3 stereo mini jack cable available in the market to simultaneously control the multiple main units with a single remote control unit through the REMOTE1 IN/OUT terminal. It is effective to use the wired remote control in the environment in which an obstacle stands in the light path or where devices are susceptible to outside light.



### 6.2. Setting the Projector ID Number for Remote Control

Every projector has its ID number and the ID number of the controlling projector must be set to the remote control in advance so that the user can operate the remote control. The ID number of the projector is set to "ALL" on shipping, and use the ID ALL button of the remote control when using only a single projector.

#### Procedure of ID setting

1. Change the position of the operation mode selector switch to "Computer".
2. Press the ID SET button, and within five seconds use the number (0 to 9) buttons to enter the 2-digit ID number set by the projector.
3. Change the position of the operation mode selector switch to "Projector".

However, if the ID ALL button is pressed, the projector can be controlled regardless of the ID number of the projector

(simultaneous control mode).

- Do not press the ID SET button accidentally or carelessly because the ID number on the remote control can be set even when no projector is around.

If the ID SET button is pressed, the ID number goes back to the one set before pressing the ID SET button unless a numeric button is pressed within five seconds after the ID SET button is pressed.

- Your specified ID number is stored in the remote control unit unless another one is specified later. However, the stored ID will be erased if the batteries of the remote control are left exhausted. When the dry cells are replaced, set the same ID number again.
- When specifying the ID number, enter a 2-digit number even if the ID has only one digit.

(Example: set "02" if the ID number is "2.")



## 7 Support for Service

### 7.1. Supporting Methods

We will support according to the following methods.

Supporting methods	Applied parts
Replaced by module or block	FM-Module (For specified components, supplies them discretely.)
	Ballast module
	Power module
Replaced by discrete components	Other components
Replaced at the manufacturing department	Optical block unit (including DMD™ block), DMD™ drive module, Assembly parts

### 7.2. Note for Replacement of P.C.Boards

#### 7.2.1. When replacing the A-P.C.Board

- Transfer the data of the original A-P.C.Board to the new A-P.C.Board using the adjustment software and a personal computer. (If you cannot transfer the data, remove IC2508 and IC2509 from the original board and mount them on the new board.)
- \* For the adjustment software, consult an authorized service center.

### 7.3. Replacement of the lithium battery on the A-P.C.Board

If the lithium battery will be empty, replace it with a new one (CR2032 or equivalent).

#### Cautions






- Explosion may occur if replacing the battery with an incorrect one.
- Dispose of used batteries according to the instructions.

## 8 Cautions for Service

### 8.1. Servicing Methods

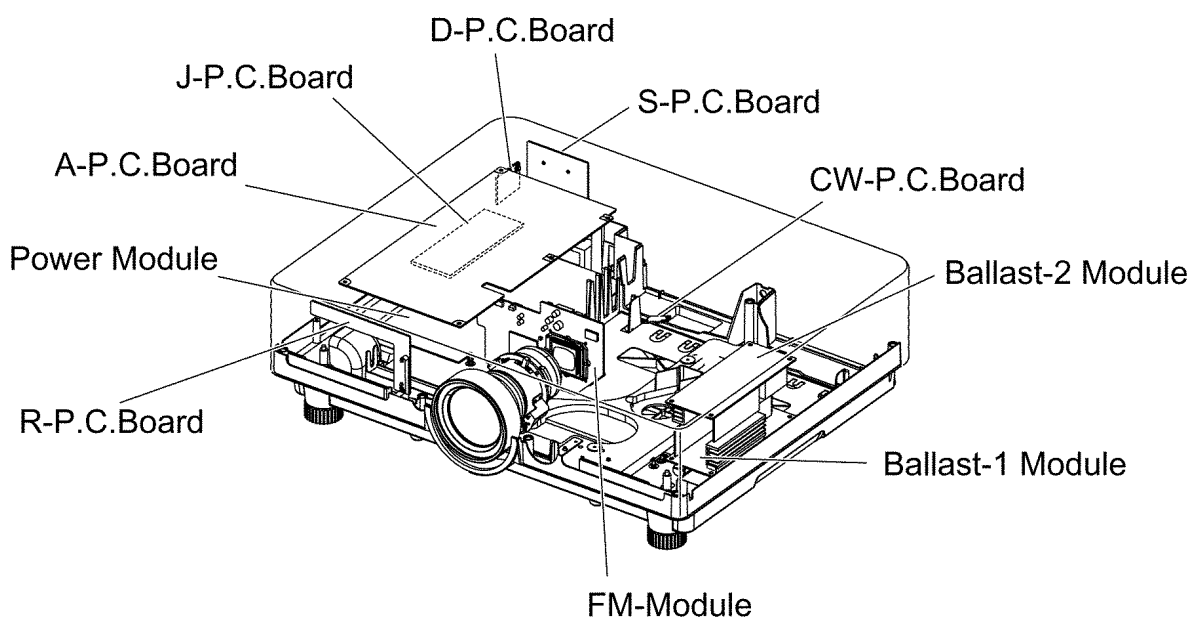
- Never unplug the power cord from the outlet, open the circuit breaker, or perform other procedures to cut off the power line during the operation of any cooling fan.
- Be sure to unplug the power cord from the power outlet before servicing.

#### Powering off the projector

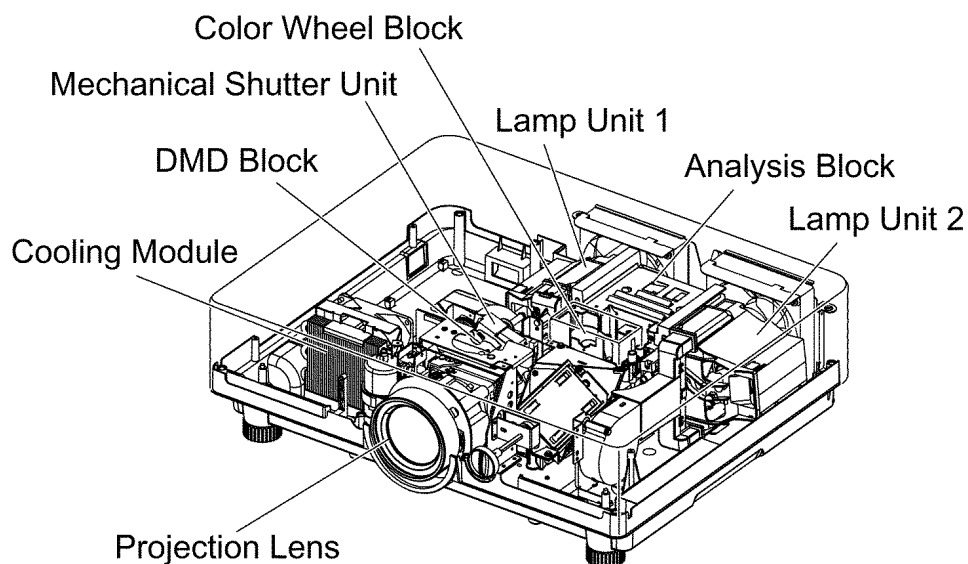
1. Press the POWER OFF "  " button.
2. Select "OK" with  or  button and press the ENTER button. (or press the POWER OFF "  " button again.)  
The projection of the image stops, and power indicator of the main unit lights up orange. (The cooling fan keeps running.)
3. Wait until the power indicator of the main unit turns to red (i.e., until the cooling fan stops).
4. Press the "  " marked side of the MAIN POWER switch to remove all power from the projector.

## 9 Parts Location

### 9.1. Electrical Parts Location



### 9.2. Electromechanical Parts Location



## 10 Replacement of Lamp Unit

### Cautions

- Wait until the lamp is cooled sufficiently before replacing the lamp unit.

### 10.1. Precautions on Lamp Unit Replacement

Remove the power plug and confirm that the surroundings of the lamp unit have cooled off.

- Be careful when handling a light source lamp. The lamp unit has high internal pressure. If improperly handled, explosion might result.
- A used lamp unit may burst if it is handled violently.  
For disposition of used lamps, request an industrial waste disposal contractor.
- Do not reset the cumulative time, except when the lamp unit has been replaced with a new unit.
- If you continue to use a lamp after the replacement time, the lamp may break.
- Philips screwdriver is necessary when replacing a lamp unit.

Take care not to slip your hand when using a screwdriver.

- A lamp unit is an optional part. Contact the dealer.

Replacement lamp unit model No.: ET-LAD55 (single bulb), ET-LAD55W (double bulbs)

Rating: 300 W

Long life lamp unit model No.: ET-LAD55L (single bulb), ET-LAD55LW (double bulbs)

Rating: 160 W

- Other lamps than specified above cannot be used. Be sure to use the specified lamp.

### 10.2. Timing of Lamp Unit Replacement

The lamp used for the light source has its due life. The life of light source lamp used in the main unit is 1 500 hours<sup>\*1</sup> (when "LAMP POWER" is "HIGH" and "LAMP SELECT" is "DUAL"). However, it may happen that the lamp becomes dead (will not light) by the time of 1 500 hours<sup>\*1</sup> depending on the characteristics of individual lamps and working conditions (lamps may reduce their life affected by the times of lighting and the intervals between previous lighting and next lighting). Therefore, it is strongly recommended for the user to keep a spare bulb. If your lamp unit is not replaced after 1 300 hours<sup>\*2</sup> (with "LAMP POWER" set at "HIGH"), power supply will be turned off automatically at the time of 1 500 hours<sup>\*1</sup>, entering a standby state. After 1 500 hours<sup>\*1</sup> of initial lighting, power supply is turned off automatically about 10 minutes later, entering a standby state even if it is turned on again.

#### • Indication after 1 300 hours<sup>\*2</sup>

(with "LAMP POWER" set at "HIGH")

When lamp unit used hours have reached 1 300 hours<sup>\*2</sup>, lamp monitor (LAMP 1 or LAMP 2) light up including standby state. Further, an on-screen indication will appear for about 30 seconds as shown in the diagram on the right, recommending replacement of lamp unit. (The indication on the right diagram will disappear after about 30 seconds or when either control button on the rear of main unit or remote control button is operated.)

After the time of 1 500 hours<sup>\*1</sup>, the on-screen indication will not disappear unless the menu (MENU) button is operated.





REPLACE LAMP

<sup>\*1</sup> This time period is 4 000 hours when long life lamp units are used.

<sup>\*2</sup> This time period is 3 800 hours when long life lamp units are used.

### 10.3. Indication of Lamp Monitor

Name of monitor lamp	Lamp indication	Information	Checkpoint	Remedial measure
<b>Lamp monitor</b>  <b>LAMP1   LAMP2</b>  	Lighting in red	Indicates the time for replacing the lamp unit.	<ul style="list-style-type: none"> <li>Did you notice a "REPLACE LAMP" message on the screen when turning on the projector power supply?</li> </ul>	<ul style="list-style-type: none"> <li>This lamp monitor lights up when the lamp unit used hours have reached 1 300 hours (3 800 hours when long life lamp units are used). Request the dealer to replace the lamp unit.</li> </ul>
	Blinking in red (3 times)	Error is detected in the lamp or lamp power.	<ul style="list-style-type: none"> <li>Did you turn the power back on immediately after turning it off?</li> </ul>	<ul style="list-style-type: none"> <li>Wait until the lamp has cooled off, and then turn on the power.</li> </ul>
			<ul style="list-style-type: none"> <li>Some error has arisen in the lamp circuit.</li> <li>Check for fluctuation (or drop) in the source voltage.</li> </ul>	<ul style="list-style-type: none"> <li>Turn off the MAIN POWER switch using the procedure on "Powering off the projector" in the section 8.1. "Servicing Methods" and consult your dealer or Authorized Service Center.</li> </ul>

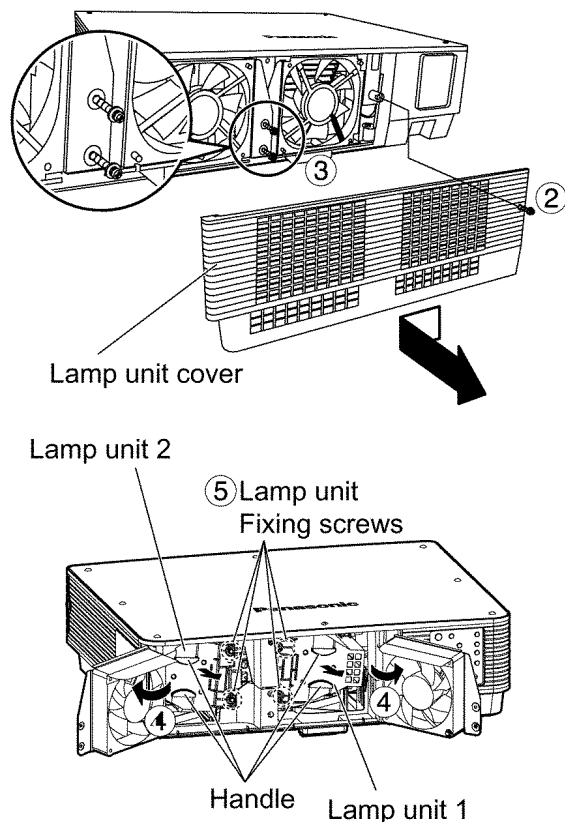
### 10.4. Procedure of Lamp Unit Replacement

**NOTE:**

- Be sure to follow steps 11 to 17 in ten minutes after turning on the projector because the projector is turned off in ten minutes if the RUNTIME indication is 1 500h or more.

- ① Turn off the **MAIN POWER** switch using the procedure on "Powering off the projector" in the section 8.1. "Servicing Methods", unplug the power cord and confirm that the surroundings of the lamp unit have cooled off.

Check that the fan has stopped running.



Have a Phillips screwdriver ready ahead of time.

- ② Remove the screw securing the lamp unit cover, and then slide the lamp unit cover a little toward the left, and remove it.

- ③ Remove the two screws securing the fan unit.

**Note** • The lamp units are constructed in such a way that the screws in steps ② and ③ will not fall through completely.

- ④ Open the fan unit as shown in the figure.

- ⑤ Remove the screws securing the lamp units (two for each unit), take hold of the handles, and remove the lamp units.

- ⑥ Install the new lamp unit.

- ⑦ Use a Phillips screwdriver to securely tighten the 2 lamp unit fixing screws (two for each unit).

- ⑧ Secure the two screws for securing the fan unit tightly.

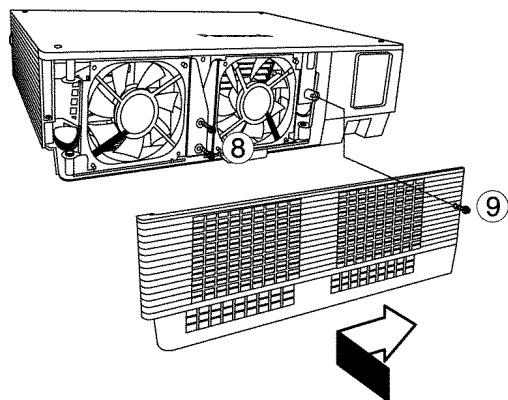
- ⑨ Slide the cover a little toward the right, and secure it using the screw for securing the lamp unit cover tightly.

**Attention** • Firmly install the lamp unit and lamp unit cover. If not installed firmly, a protection circuit will function and the power will not be turned on.

## Caution

**The lamp unit will be hot after it has been used.**

You might get burned if you touch it while it is still hot.



- ⑩ Insert the power cord plug into the wall outlet and then press the MAIN POWER switch.

**Attention** • If the power does not turn on even after turning the MAIN POWER switch "I", turn the MAIN POWER "O", confirm that the lamp unit and door are installed correctly, and turn on again.

MENU	
PICTURE	
POSITION	
ADVANCED MENU	
LANGUAGE	
OPTION1	
OPTION2	

SYSTEM INFORMATION	
ROM VERSION	1.00.00
SET RUNTIME	300h
LAMP1 LOW	100h
HIGH	200h
TOTAL	300h

LAMP TIME RESET	
LAMP1	
LAD55	1433h
LAD55L	0h
LAMP2	
LAD55	1100h
LAD55L	0h

- ⑪ Press the "I" button so that a picture is projected onto the screen.
- ⑫ Press the "MENU" button to display the MAIN MENU screen, and then press the ▲ and ▼ buttons to move the cursor to select "OPTION2".
- ⑬ Press the "ENTER" button to display the "OPTION2" screen, and select "SYSTEM INFORMATION" with the ▲ and ▼ buttons.
- ⑭ Press the "ENTER" button.  
The SYSTEM INFORMATION screen will be displayed.
- ⑮ Press and hold the "ENTER" button on the projector or the remote control for approximately 3 seconds.  
An item "LAMP TIME RESET" will be added.
- ⑯ Select the lamp which has been replaced with the ▲ and ▼ buttons.  
LAMP1: Replace the LAMP UNIT 1  
LAMP2: Replace the LAMP UNIT 2
- ⑰ Press the ENTER button, and when the "LAMP TIME RESET" display flashes, press the ENTER button again.  
The used hours of the specified lamp unit will be reset to zero.  
When more than one lamp has been replaced, repeat the procedure from step ⑯.

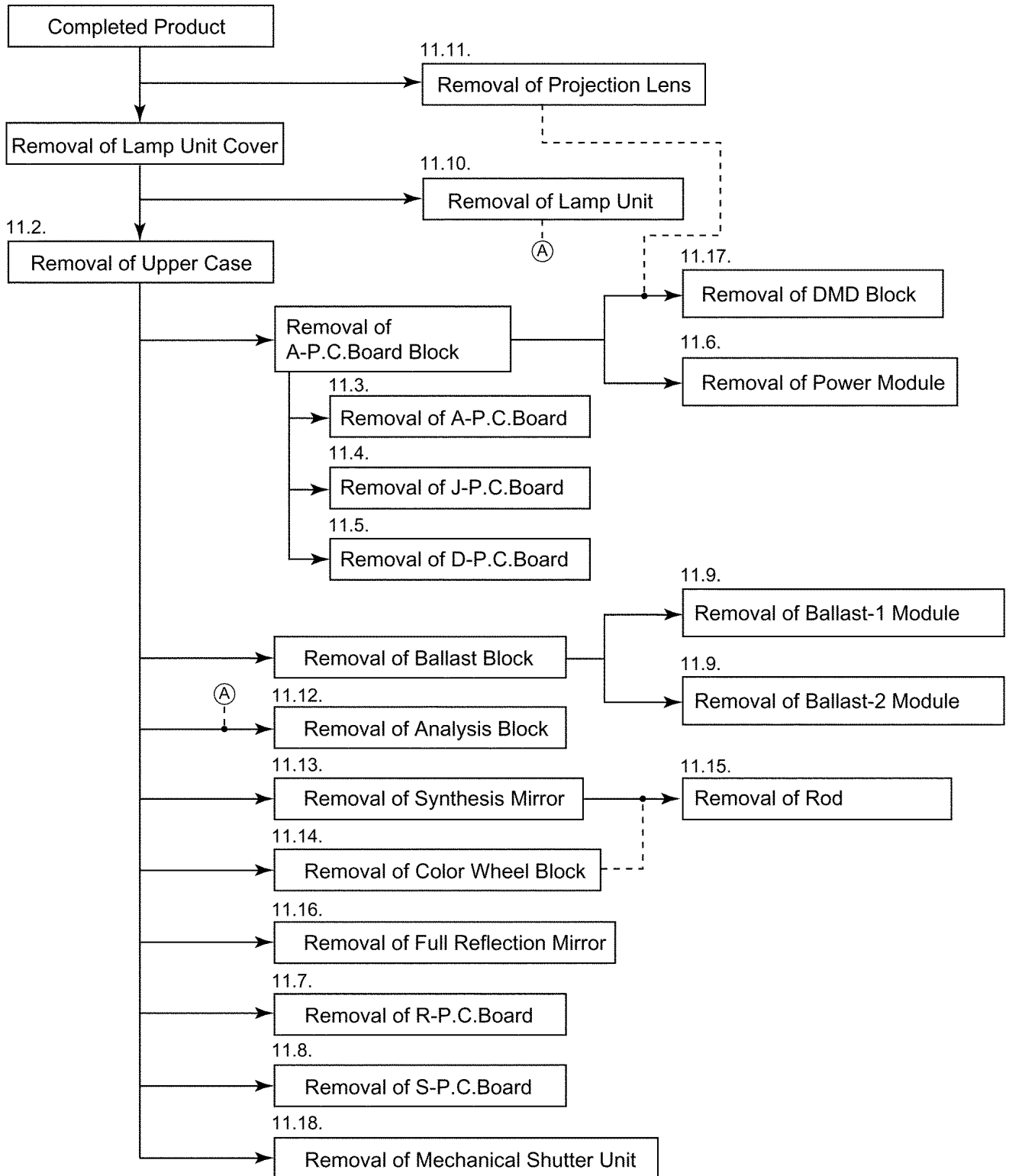
**Note**

- When the "LAMP TIME RESET" display flashes, the lamp time reset can be canceled by pressing the MENU button.
- The used hours of the lamp units can also be reset to zero by taking the following action instead of steps ⑪ to ⑰.  
When lamp unit 1 has been replaced:  
In the standby mode, press the number buttons in the sequence of 737381, and then press the ENTER button.  
When lamp unit 2 has been replaced:  
In the standby mode, press the number buttons in the sequence of 737382, and then press the ENTER button.  
When the used hours have been reset, the lamp monitor (LAMP1/LAMP2) will flash for 3 seconds.

# 11 Disassembly Instructions

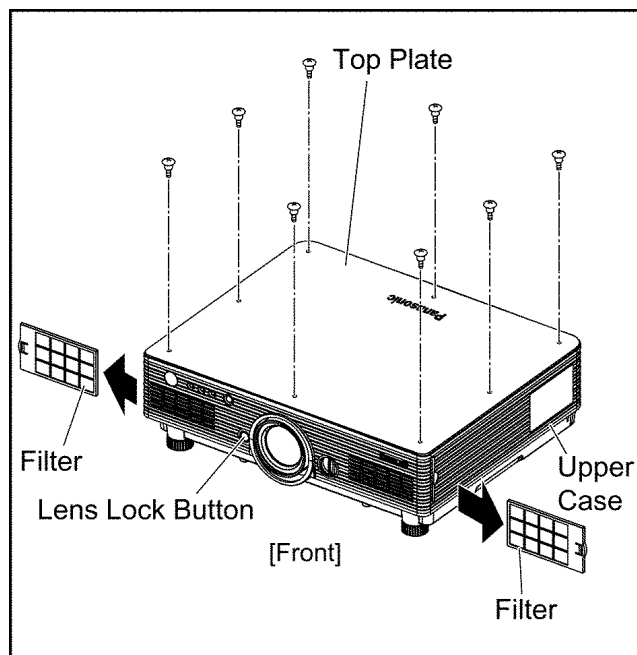
## 11.1. Flowchart for Disassembly

To assemble, reverse the disassembly procedures.



## 11.2. Removal of Upper Case

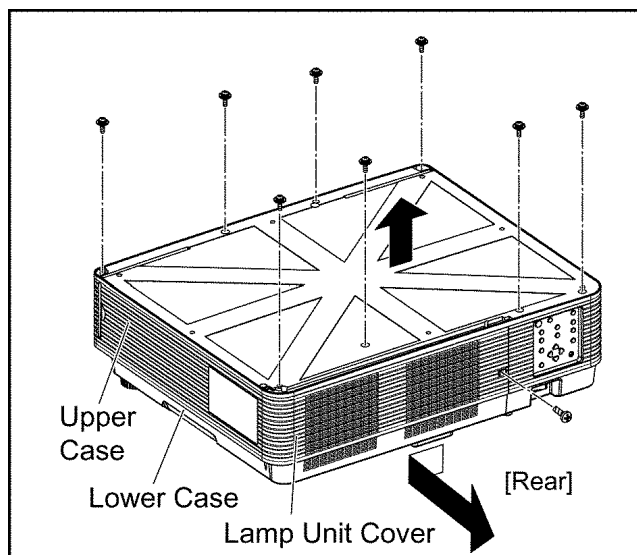
- (1) Unscrew the 8 screws and remove the top plate.
- (2) Remove the filters (R, L). (Pull them horizontally out.)



- (3) Unscrew the 1 screw and remove the lamp unit cover while sliding it horizontally.
- (4) Unscrew the 8 screws and remove the upper case.

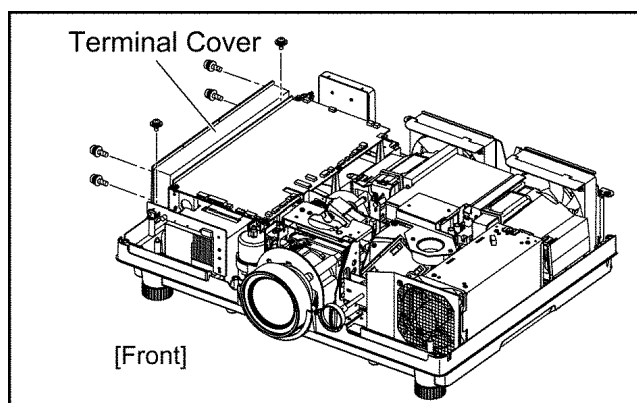
### Note:

- Confirm the lens lock button actuates correctly when you reassemble the upper case as it was.
- When you attach the upper case, take care not caught nor protruding of the dustproof sheet around the projection lens.
- After attaching the upper case, remove and reinstall the projection lens according to the section 11.11. "Removal of Projection Lens" because the dustproof sheet might protrude or deform.



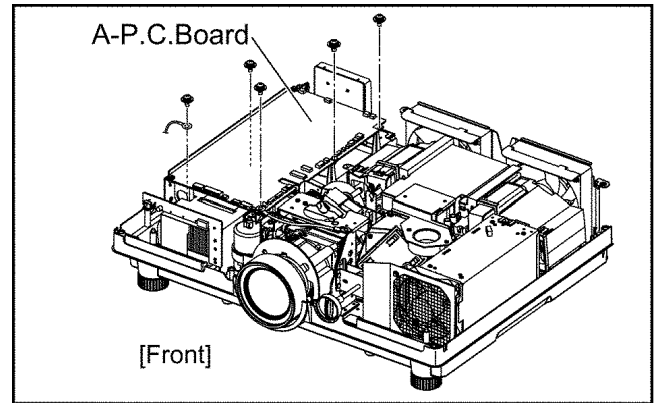
## 11.3. Removal of A-P.C.Board

- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 6 screws and remove the terminal cover.

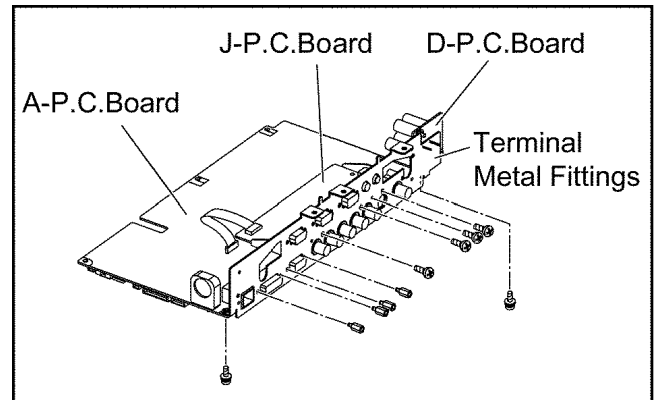




- (3) Unscrew the 5 screws and remove the A-P.C.Board block.

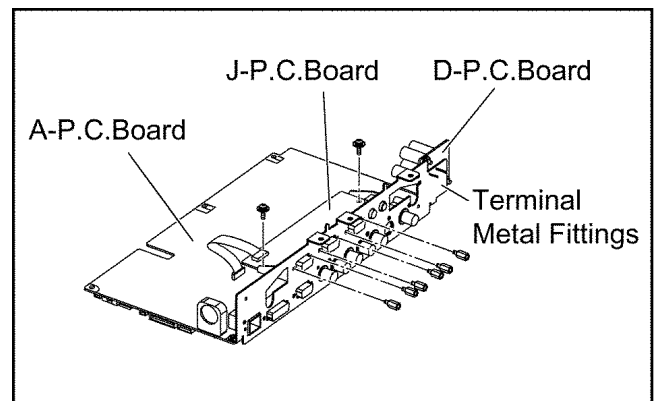


- (4) Pull out the flexible cable connected to the J-P.C.Board. (The reverse side of A-P.C.Board)
- (5) Unscrew the 10 screws and remove the A-P.C.Board. (The block of the terminal metal fittings, J-P.C.Board and D-P.C.Board remains.)



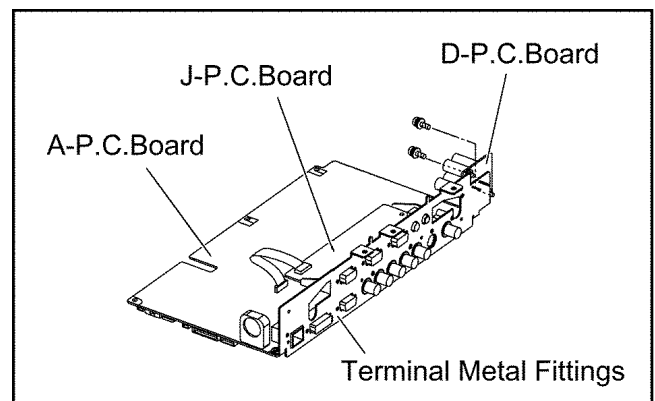
## 11.4. Removal of J-P.C.Board

- (1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".
- (2) Pull out the flexible cable connected to the A-P.C.Board.
- (3) Unscrew the 8 screws and remove the J-P.C.Board.



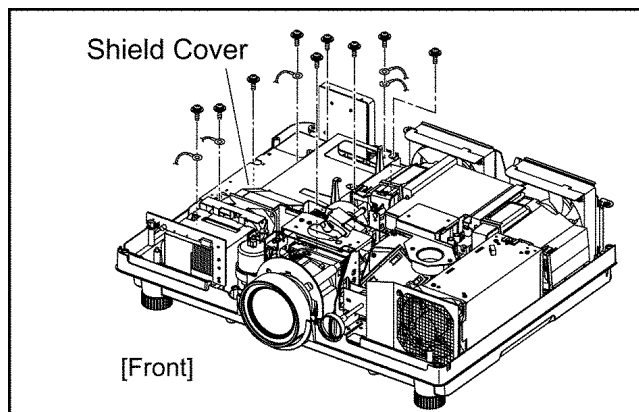
## 11.5. Removal of D-P.C.Board

- (1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".
- (2) Unscrew the 2 screws and remove the D-P.C.Board.

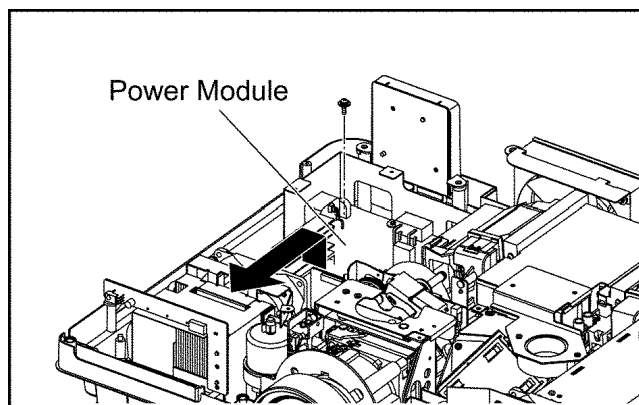


## 11.6. Removal of Power Module

- (1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".
- (2) Unscrew the 3 screws and release the 3 grounding terminals.
- (3) Unscrew the 6 screws and remove the shield cover.

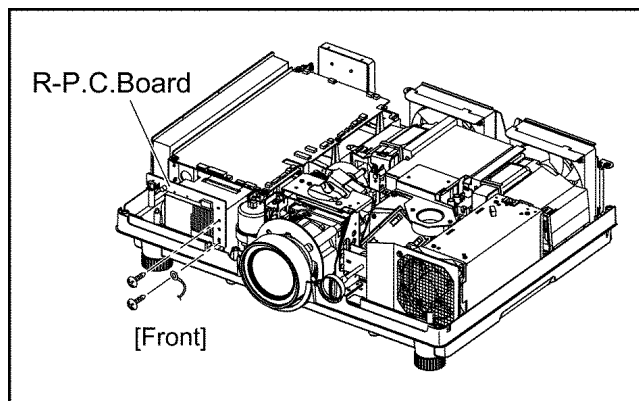


- (4) Unscrew the 1 screw and remove the power module.



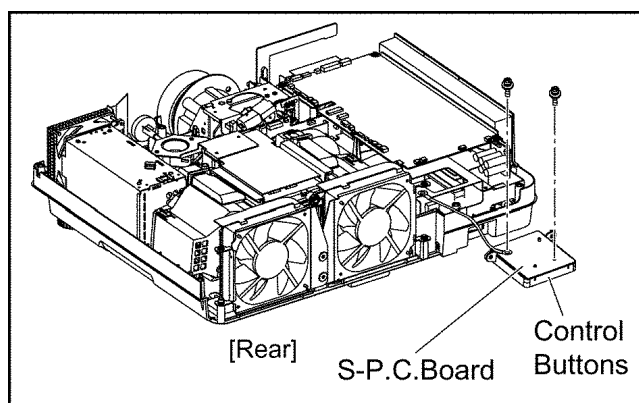
## 11.7. Removal of R-P.C.Board

- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the R-P.C.Board.



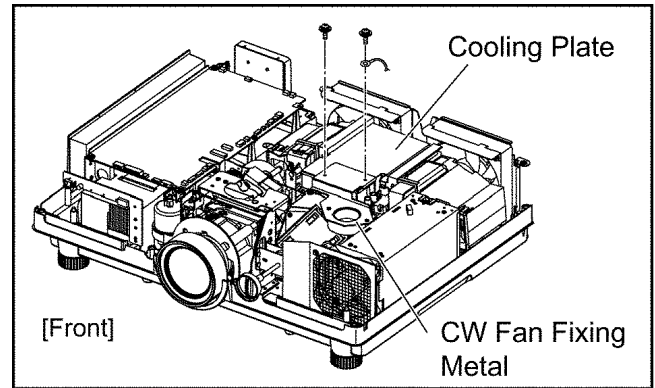
## 11.8. Removal of S-P.C.Board

- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the S-P.C.Board from the control buttons.

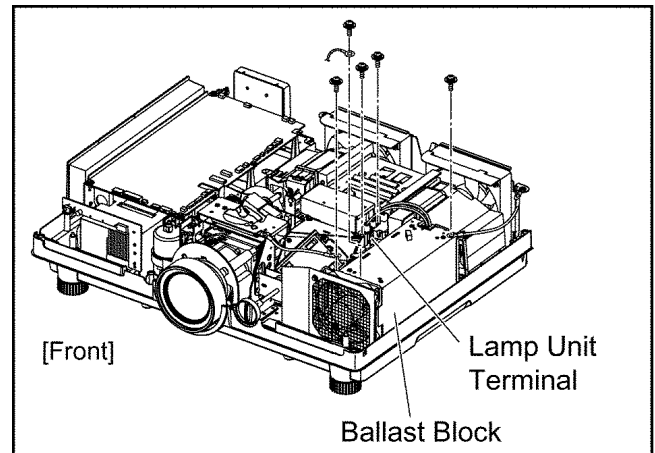


## 11.9. Removal of Ballast-1 and Ballast-2 Modules

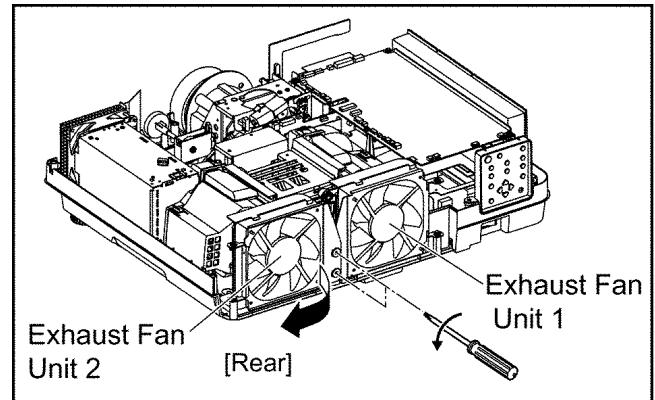
- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the CW fan fixing metal and the cooling plate.



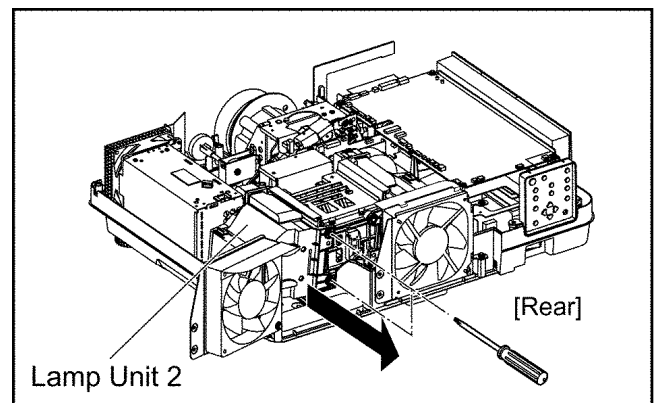
- (3) Unscrew the 3 screws and release the grounding terminals.
- (4) Unscrew the 2 screws and release the lamp unit terminals.



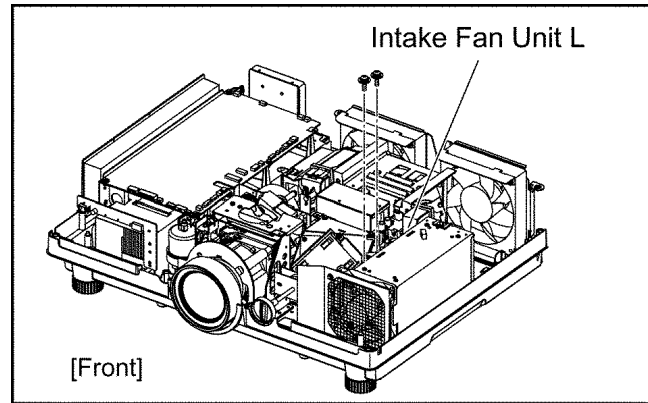
- (5) Loosen the 2 screws until they idle and open the exhaust fan unit 2.



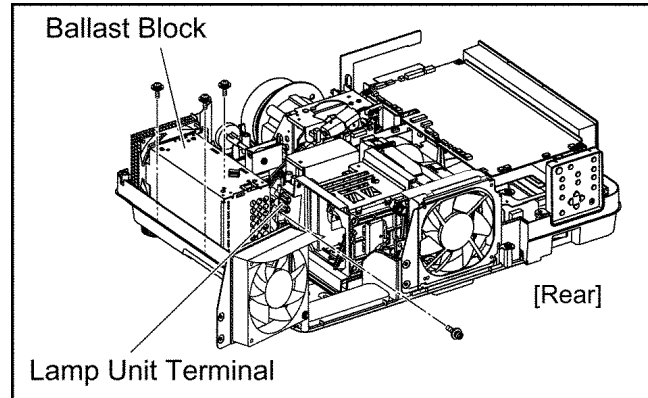
- (6) Loosen the 2 screws fixing the lamp unit until they idle and remove the lamp unit 2.



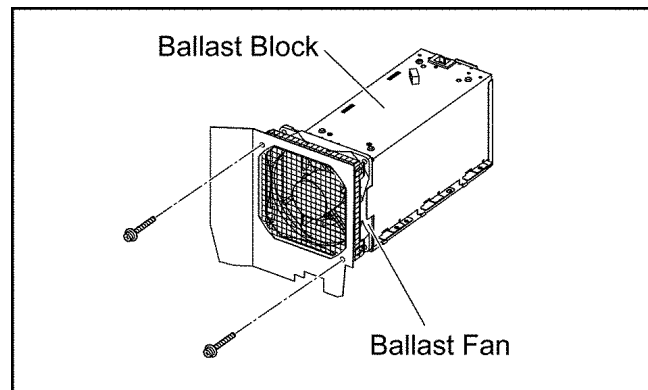
- (7) Unscrew the 2 screws and remove the intake fan unit L.



- (8) Unscrew the 1 screw and release the lamp unit terminal.  
 (9) Unscrew the 3 screws and release the ballast block.



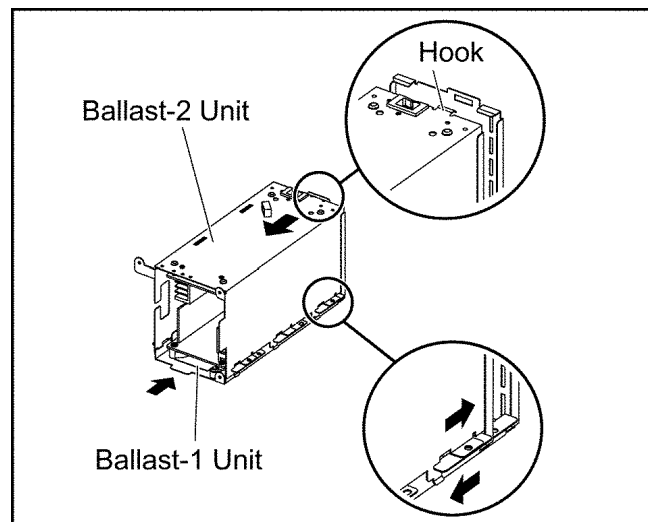
- (10) Unscrew the 2 screws and remove the ballast fan.



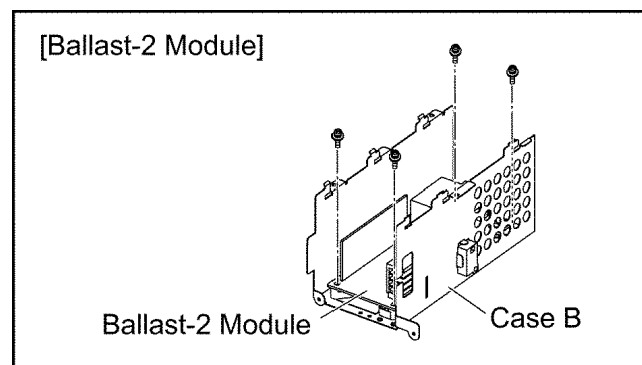
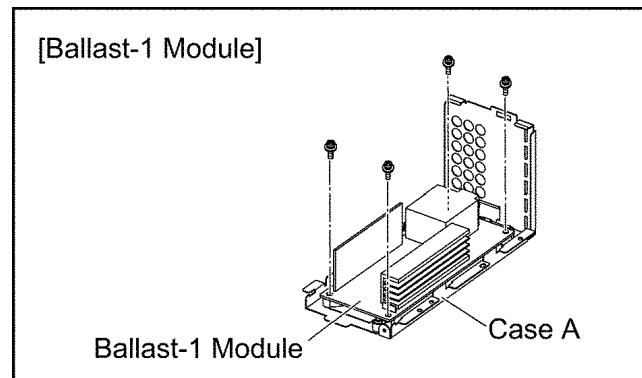
- (11) Disconnect the connectors to the ballast-1 and ballast-2 modules.  
 (12) While sliding the ballast units 1 and 2 mutually, disconnect their hooks and separate the units.

**Note:**

- Work carefully not to deform the ballast unit case (A, B).

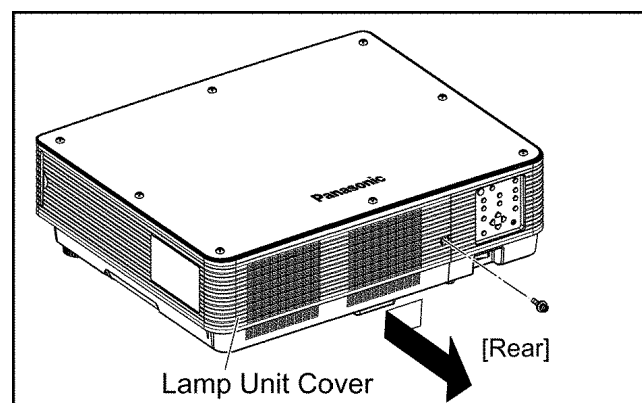


- (13) Unscrew the 4 screws and remove the ballast module.

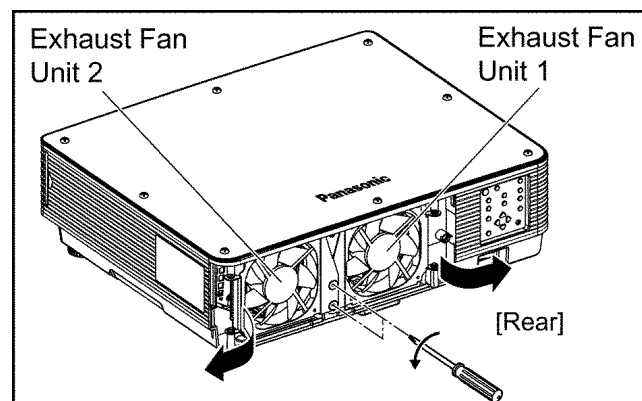


## 11.10. Removal of Lamp Unit

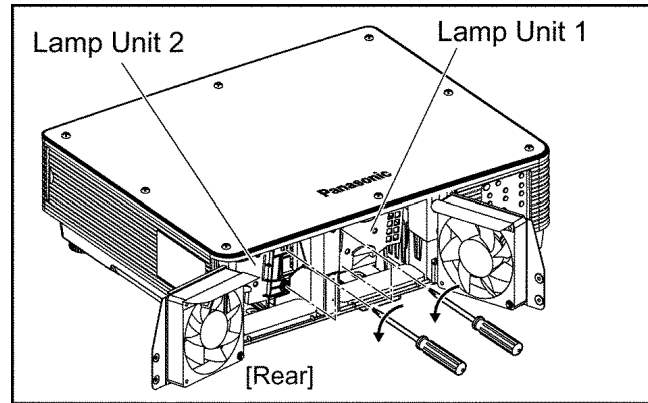
- (1) Unscrew the 1 screw fixing the lamp unit cover and slightly slide the cover horizontally and remove it.



- (2) Loosen the 2 screws until they idle and open the exhaust fan units outside.

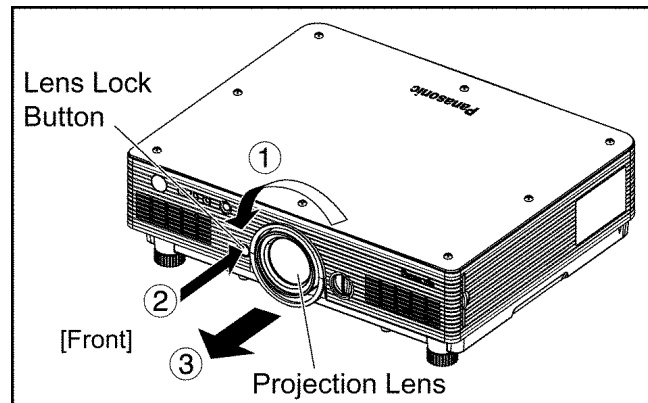


- (3) Loosen each of 2 screws fixing the lamp unit until they idle, hold the grip and take the lamp unit out.



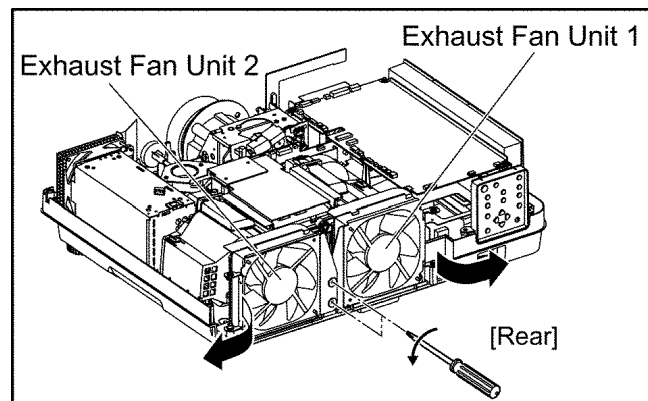
## 11.11. Removal of Projection Lens

- (1) Fully turn the projection Lens counterclockwise.
- (2) Turn the projection lens counterclockwise in addition while pressing the lens lock button.
- (3) Remove the projection lens.

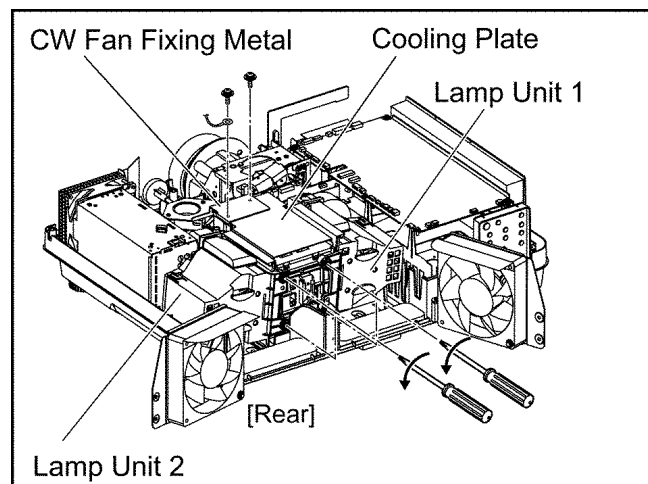


## 11.12. Removal of Analysis Block

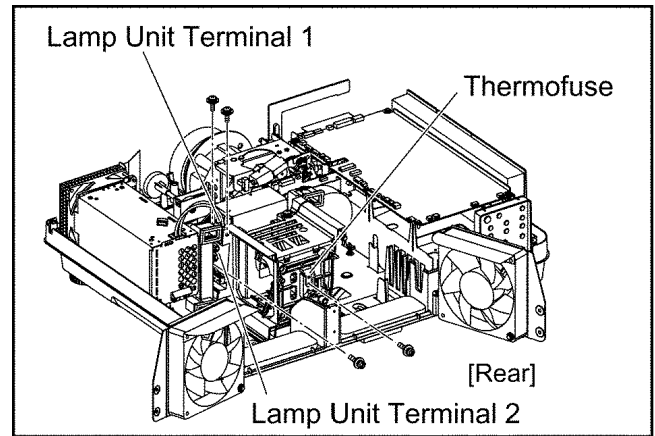
- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Loosen the 2 screws until they idle and open the exhaust fan units 1 and 2 outside.



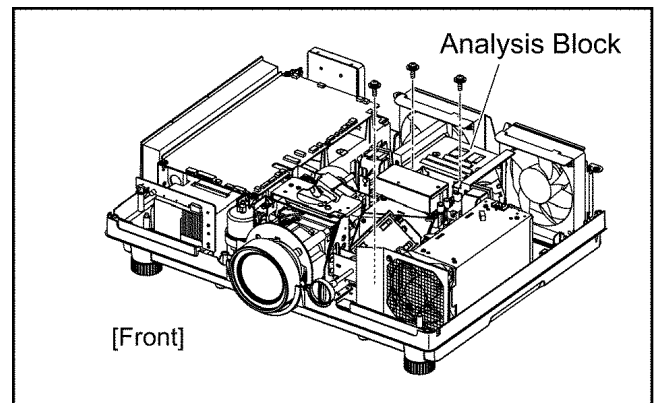
- (3) Loosen each of 2 screws fixing the lamp units until they idle, remove the lamp units 1 and 2.
- (4) Unscrew the 2 screws and remove the CW fan fixing metal with fan and the cooling plate.



- (5) Unscrew the 2 screws and release the lamp unit terminal 1.
- (6) Unscrew the 1 screw and release the lamp unit terminal 2.
- (7) Unscrew the 1 screw and remove the thermofuse.

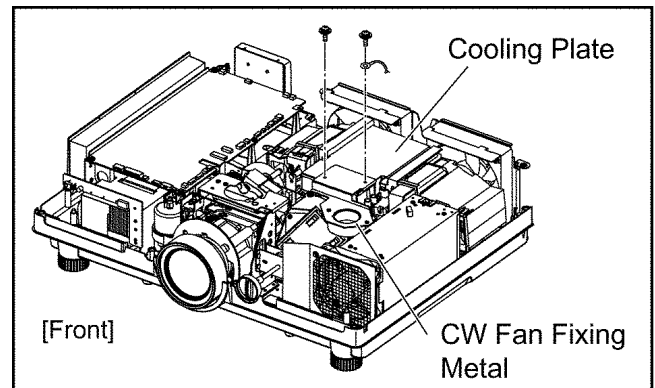


- (8) Unscrew the 3 screws and remove the analysis block.

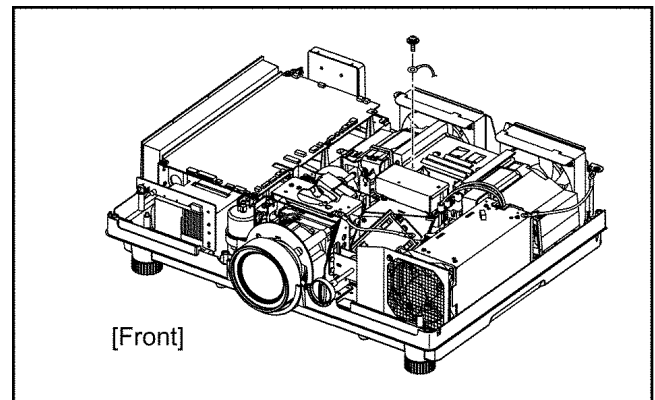


### 11.13. Removal of Synthesis Mirror

- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the CW fan fixing metal with fan and the cooling plate.



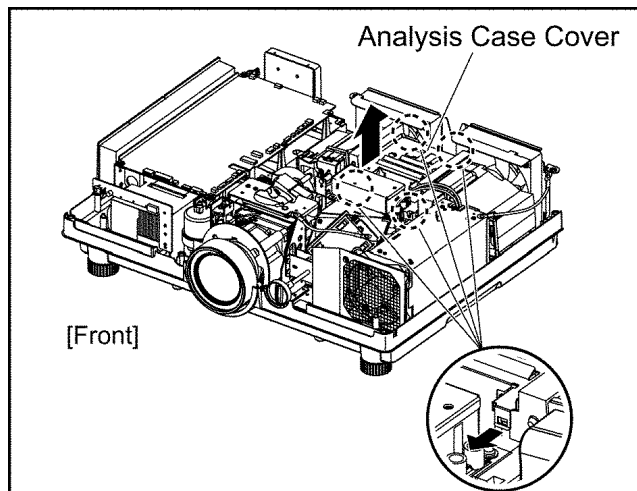
- (3) Unscrew the 1 screw and remove the grounding terminal.



- (4) Unhook the 4 hooks and remove the analysis case cover.

**Notes:**

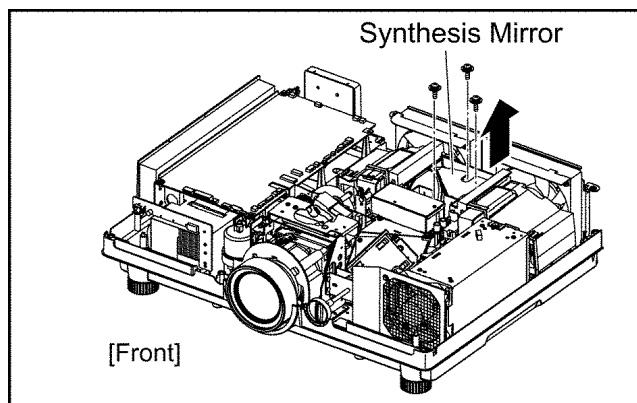
- Work carefully not to deform the hooks of the analysis case cover.
- When the analysis case cover is removed, be careful not to touch the rod.



- (5) Unscrew the 3 screws and remove the synthesis mirror.

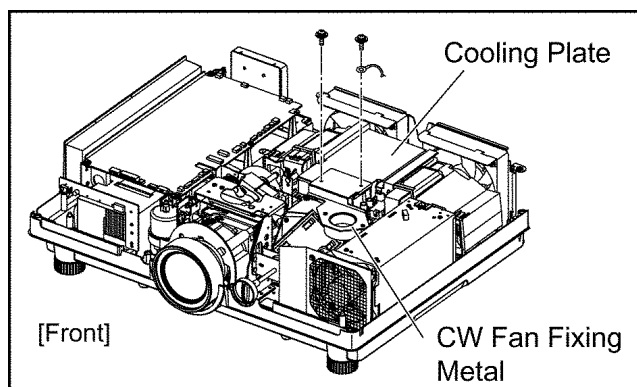
**Notes:**

- When the synthesis mirror is removed, be careful not to deform or damage the component (shading plate) of the rod (complete).
- Do not touch the surface of the synthesis mirror. If it becomes dirty or damaged, the performance may be deteriorated.

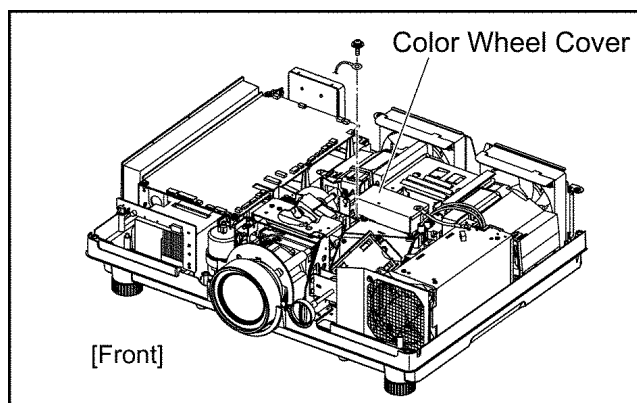


## 11.14. Removal of Color Wheel Block (Analysis Block)

- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the CW fan fixing metal with fan and the cooling plate.



- (3) Unscrew the 1 screws and remove the color wheel cover.

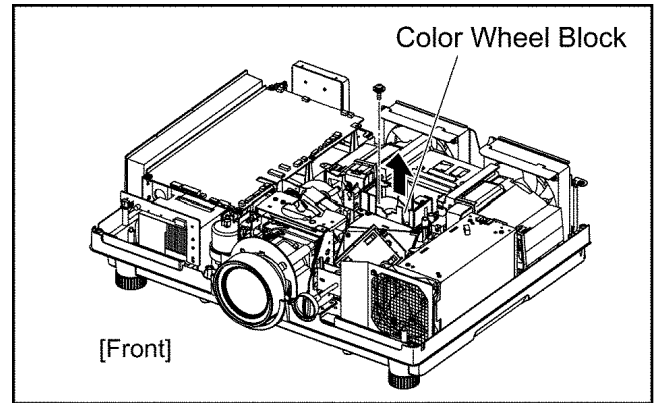




- (4) Disconnect connectors and flexible cable from/to the color wheel block.
- (5) Unscrew the 1 screw and remove the color wheel block.

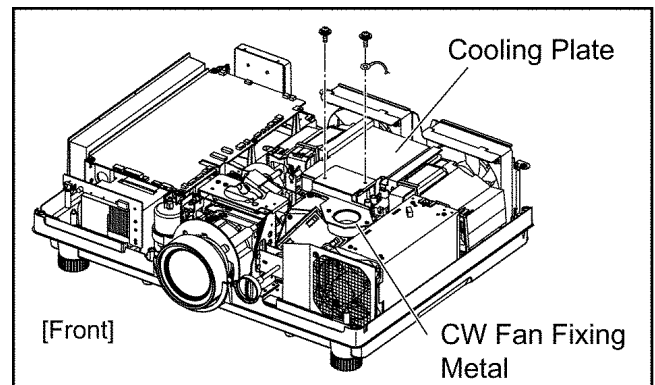
**Note:**

- If the optical components (color wheel, rod in the analysis block, etc.) become dirty or damaged, the performance may be deteriorated. Work carefully enough in handling.

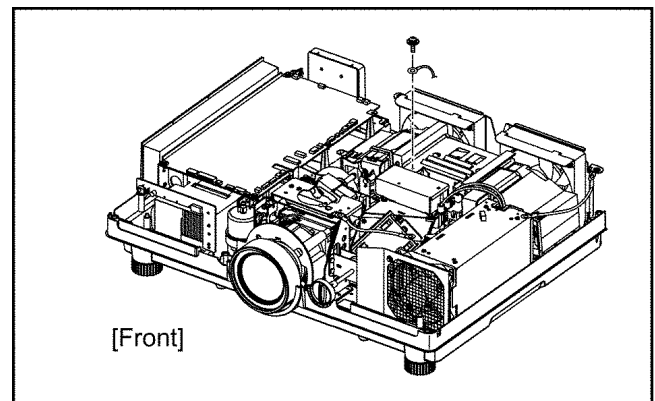


## 11.15. Removal of Rod (complete)

- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the CW fan fixing metal with fan and the cooling plate.



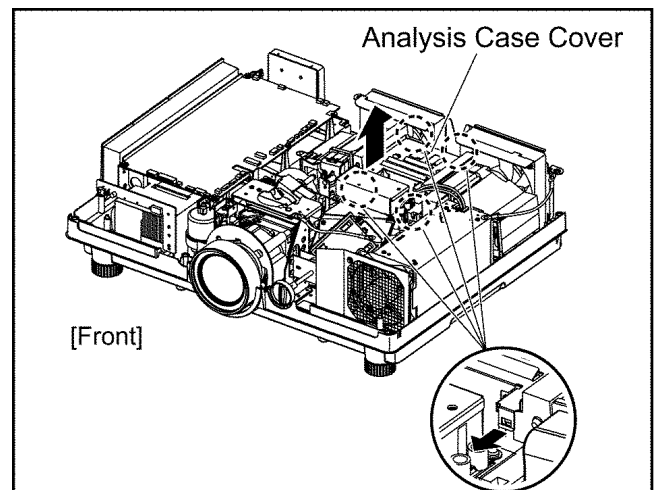
- (3) Unscrew the 1 screw and remove the grounding terminal.



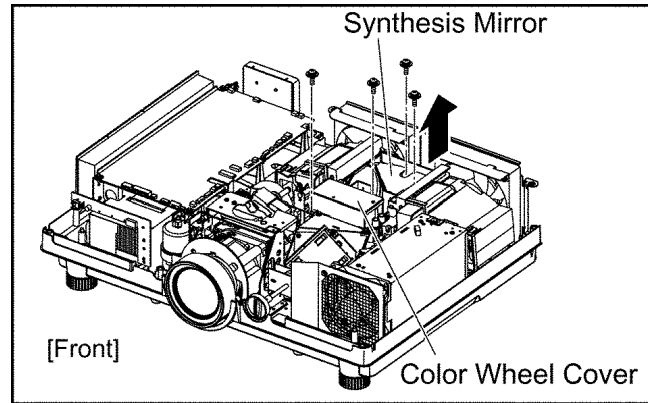
- (4) Unhook the 4 hooks and remove the analysis case cover.

**Notes:**

- Work carefully not to deform the hooks of the analysis case cover.
- When the analysis case cover is removed, be careful not to touch the rod.



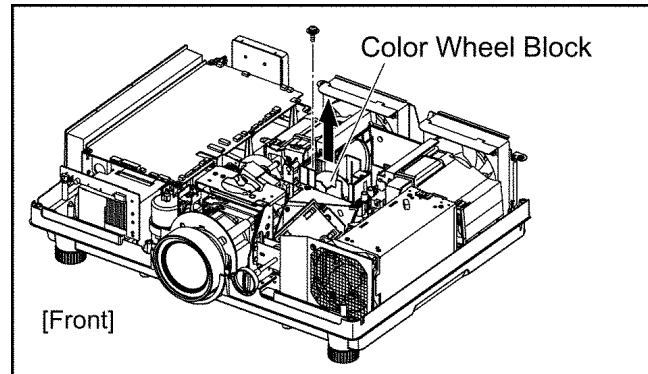
- (5) Unscrew the 3 screws and remove the synthesis mirror.
- (6) Unscrew the 1 screws and remove the color wheel cover.



- (7) Disconnect connectors and flexible cable from/to the color wheel block.
- (8) Unscrew the 1 screw and remove the color wheel block.

**Note:**

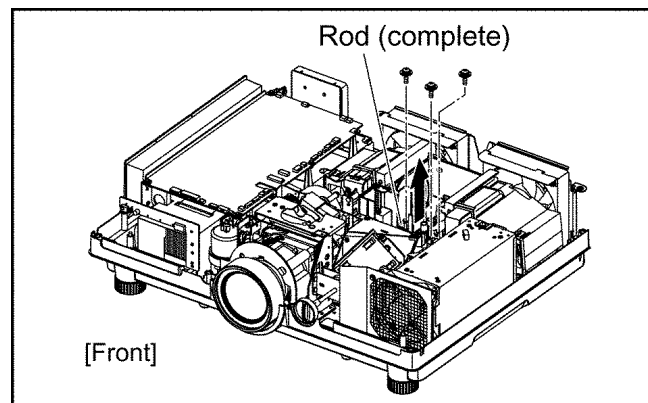
- If the optical components (color wheel, rod in the analysis block, etc.) become dirty or damaged, the performance may be deteriorated. Work carefully enough in handling.



- (9) Unscrew the 3 screws and remove the rod (complete).

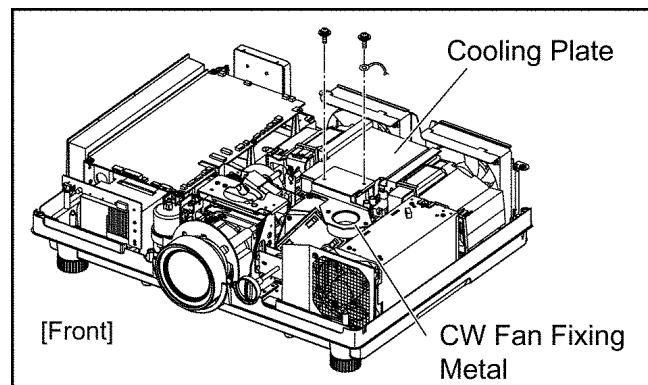
**Note:**

- Handle with care not to make dirty, damage or deform the rod integrator or shading plate of the rod (complete).

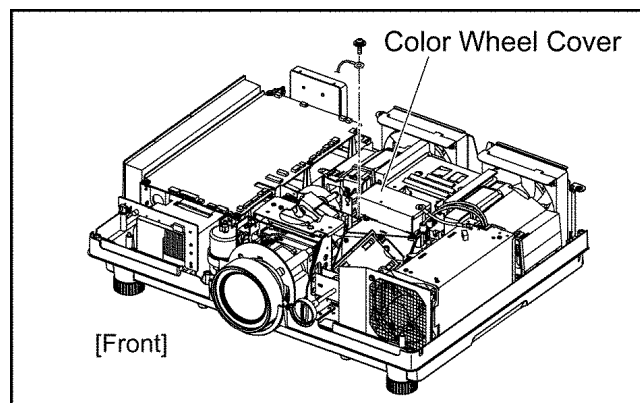


## 11.16. Removal of Full Reflection Mirror (complete)

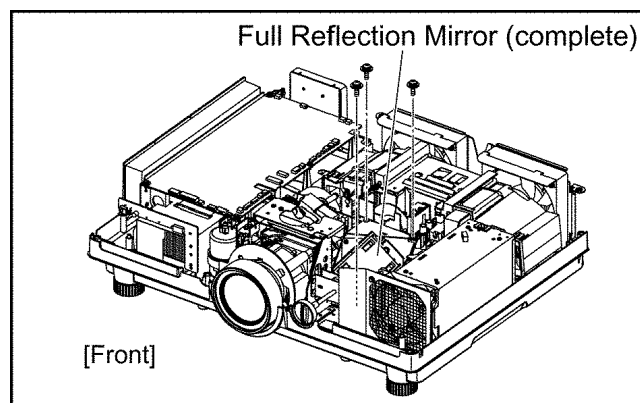
- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 2 screws and remove the CW fan fixing metal with fan and the cooling plate.



- (3) Unscrew the 1 screw and remove the color wheel cover.

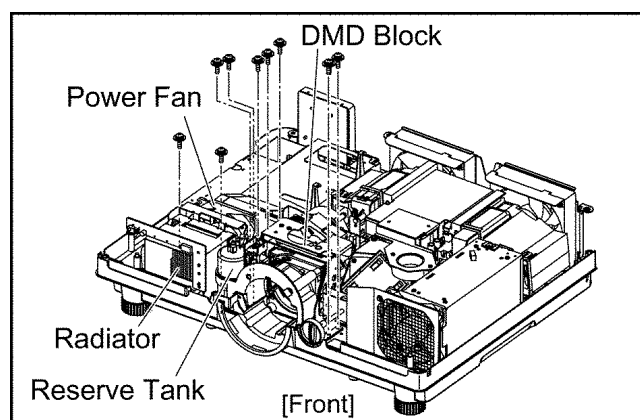


- (4) Unscrew the 3 screws and remove the full reflection mirror (complete).



## 11.17. Removal of DMD Block (complete)

- (1) Remove the projection lens according to the section 11.11. "Removal of Projection Lens".
- (2) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".
- (3) Unscrew the 2 screws and remove the power fan with metal fittings. [The radiator (liquid-cooled module) is released.]
- (4) Unscrew the 2 screws and release the reserve tank (liquid-cooled module).
- (5) Unscrew the 5 screws and release the DMD block. [The pump (liquid-cooled module) is installed in the back of the DMD block.]
- (6) Take the DMD block and the liquid-cooled module (radiator, reserve tank) out. (They are laid pipes from/to tubes of the liquid-cooled module.)



- (7) Unscrew the 4 screws and remove the pump (liquid-cooled module).

**Note:**

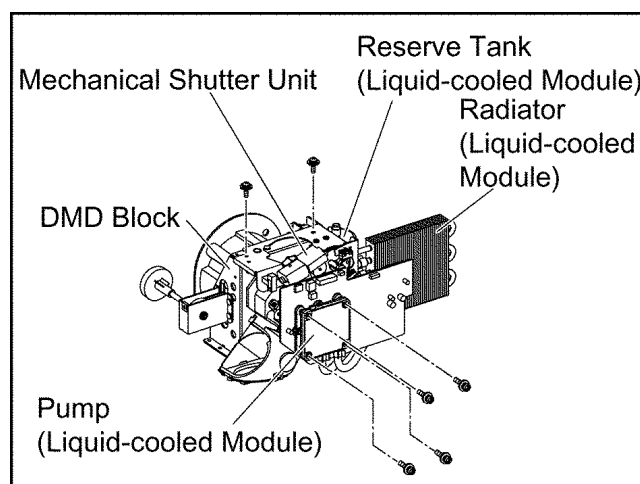
- Do not disconnect the piping tube of the liquid-cooled module.

- (8) Unscrew the 2 screws and remove the mechanical shutter unit.

**Caution for disassembling**

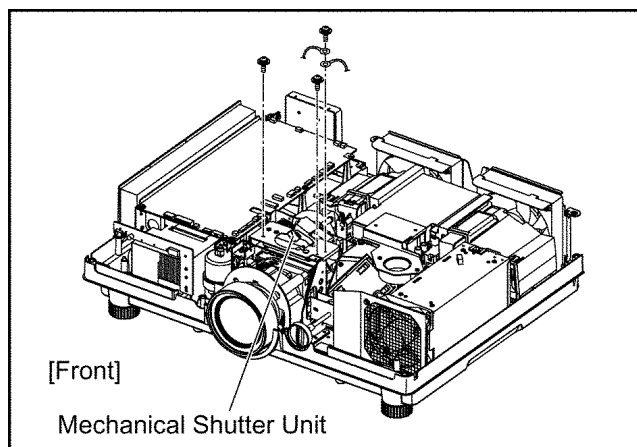
- The DMD block periphery is composed of precise optical components.

When disassembling or reassembling, work noting damage and the wound of the peripheral components.



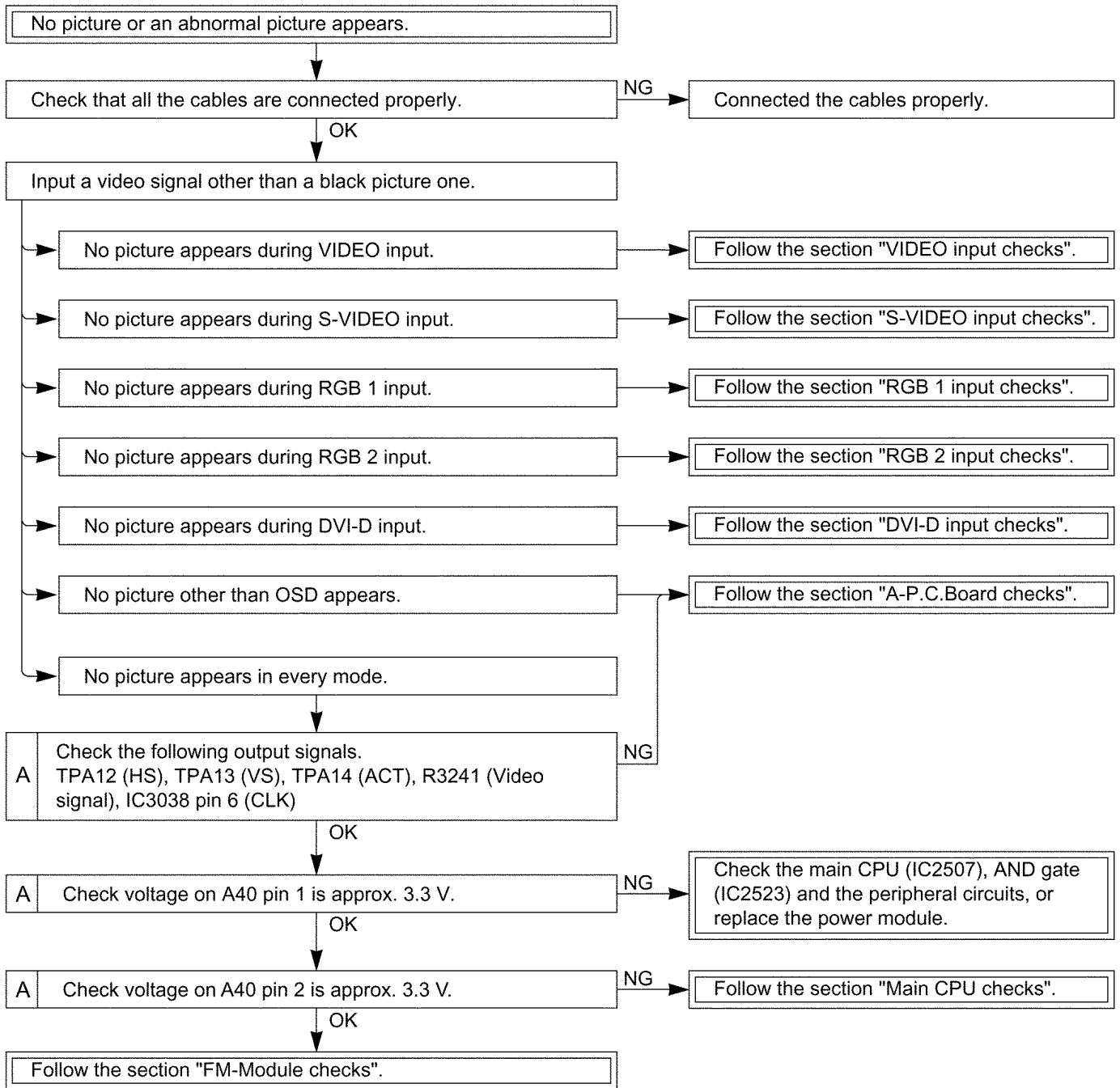
## 11.18. Removal of Mechanical Shutter Unit

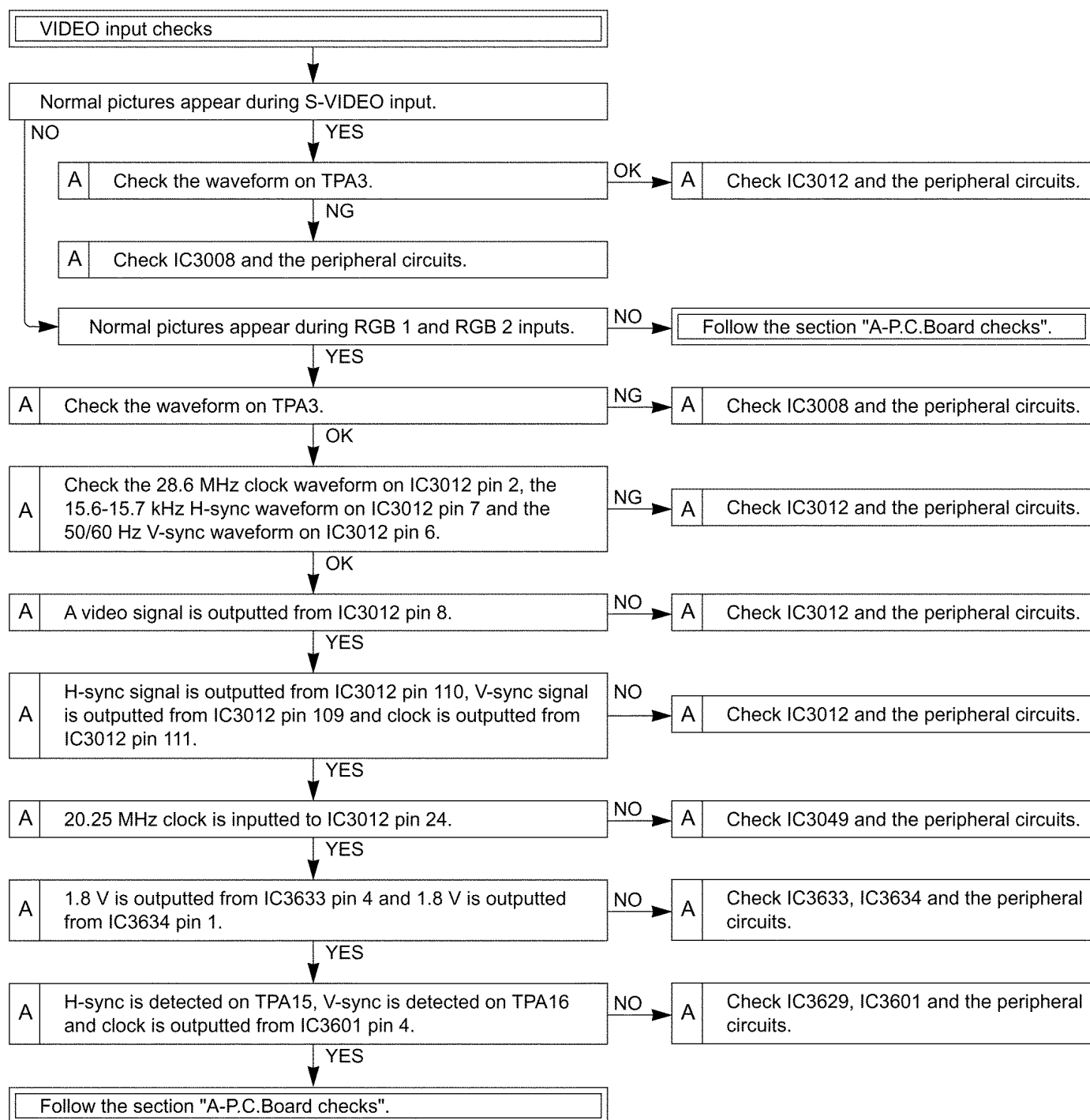
- (1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
- (2) Unscrew the 1 screw and remove the grounding terminal.
- (3) Release the lead wires from clamping.
- (4) Unscrew the 2 screws and remove the mechanical shutter unit.

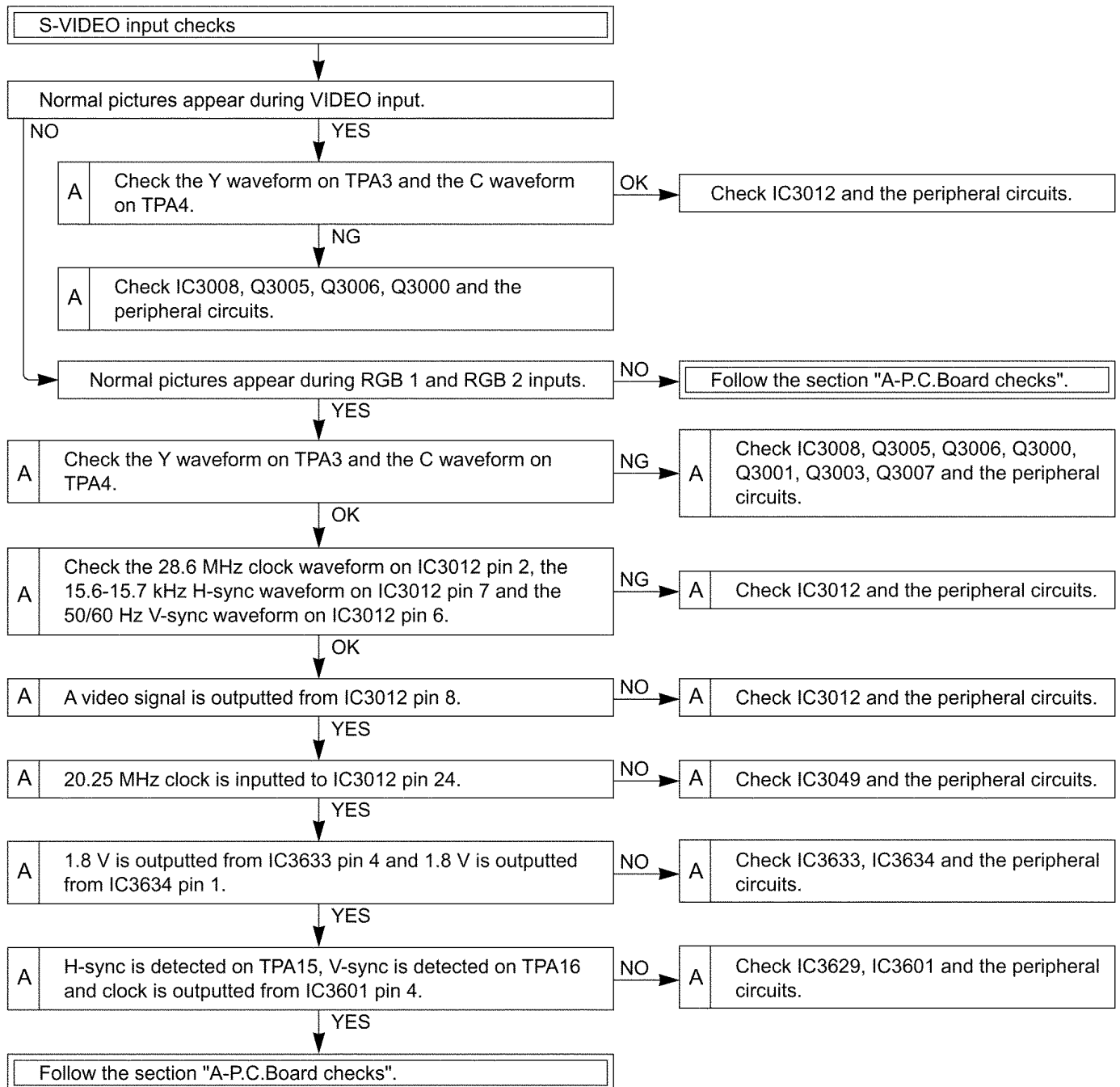


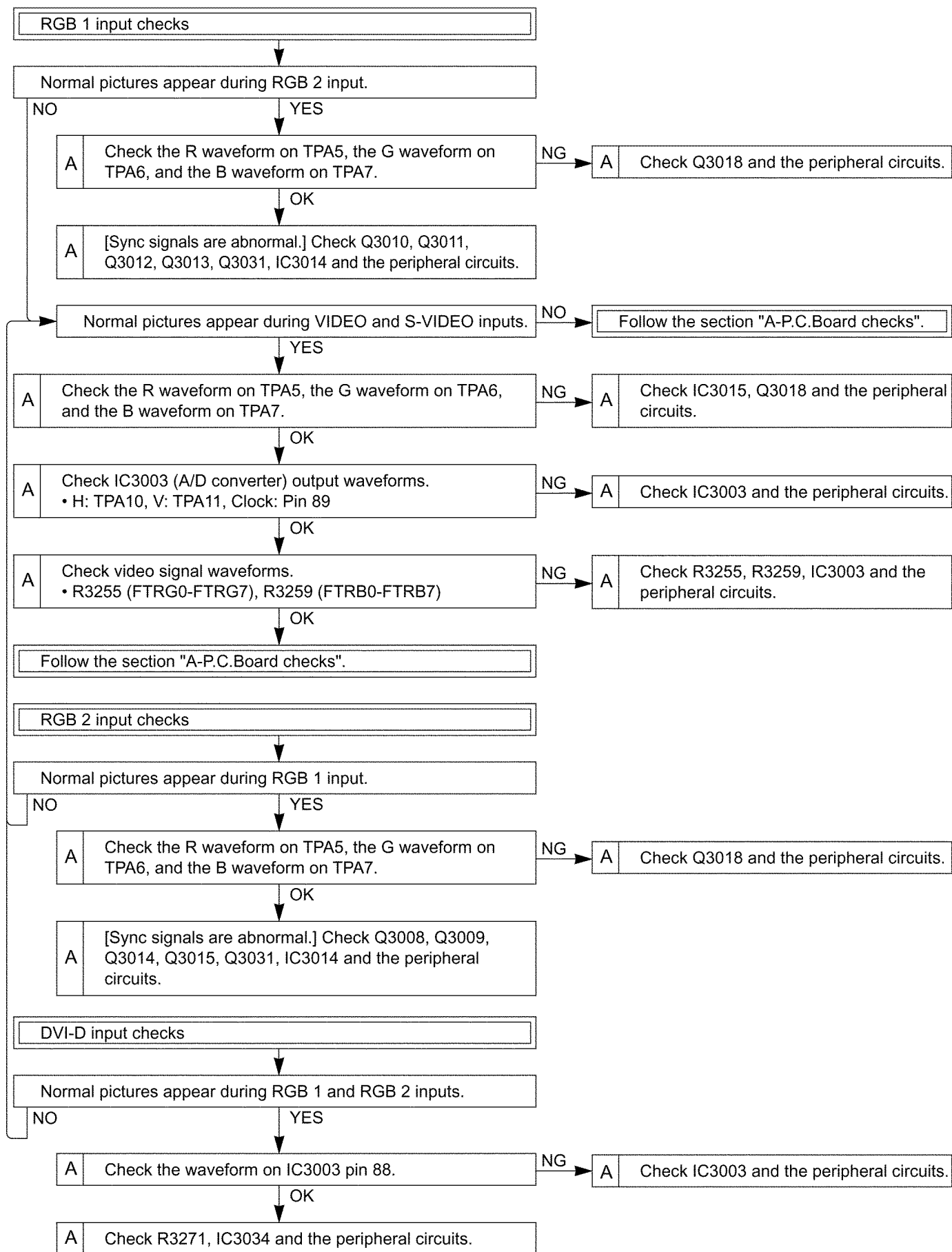
# 12 Troubleshooting

The alphabets (A, FM, etc.) in the left box of the inspection items indicate the names of P.C.Boards or modules to be checked.

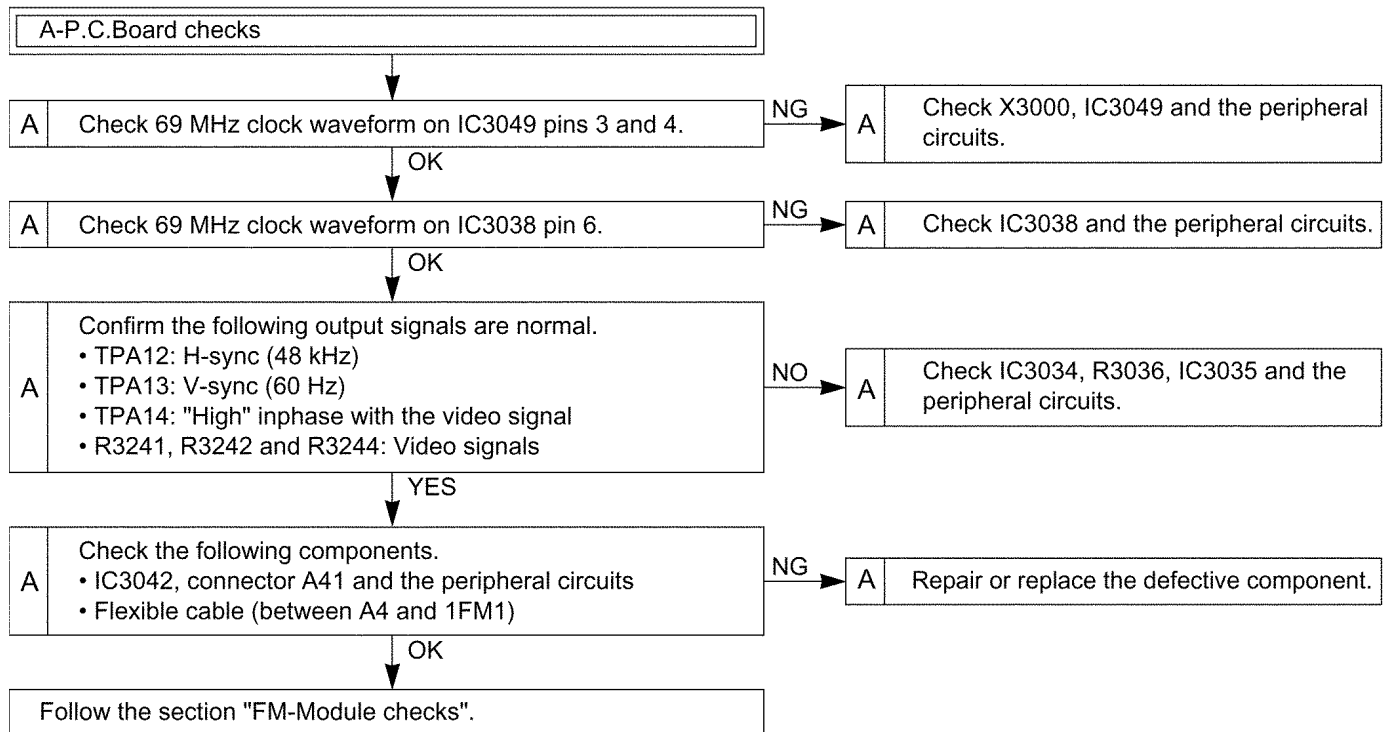


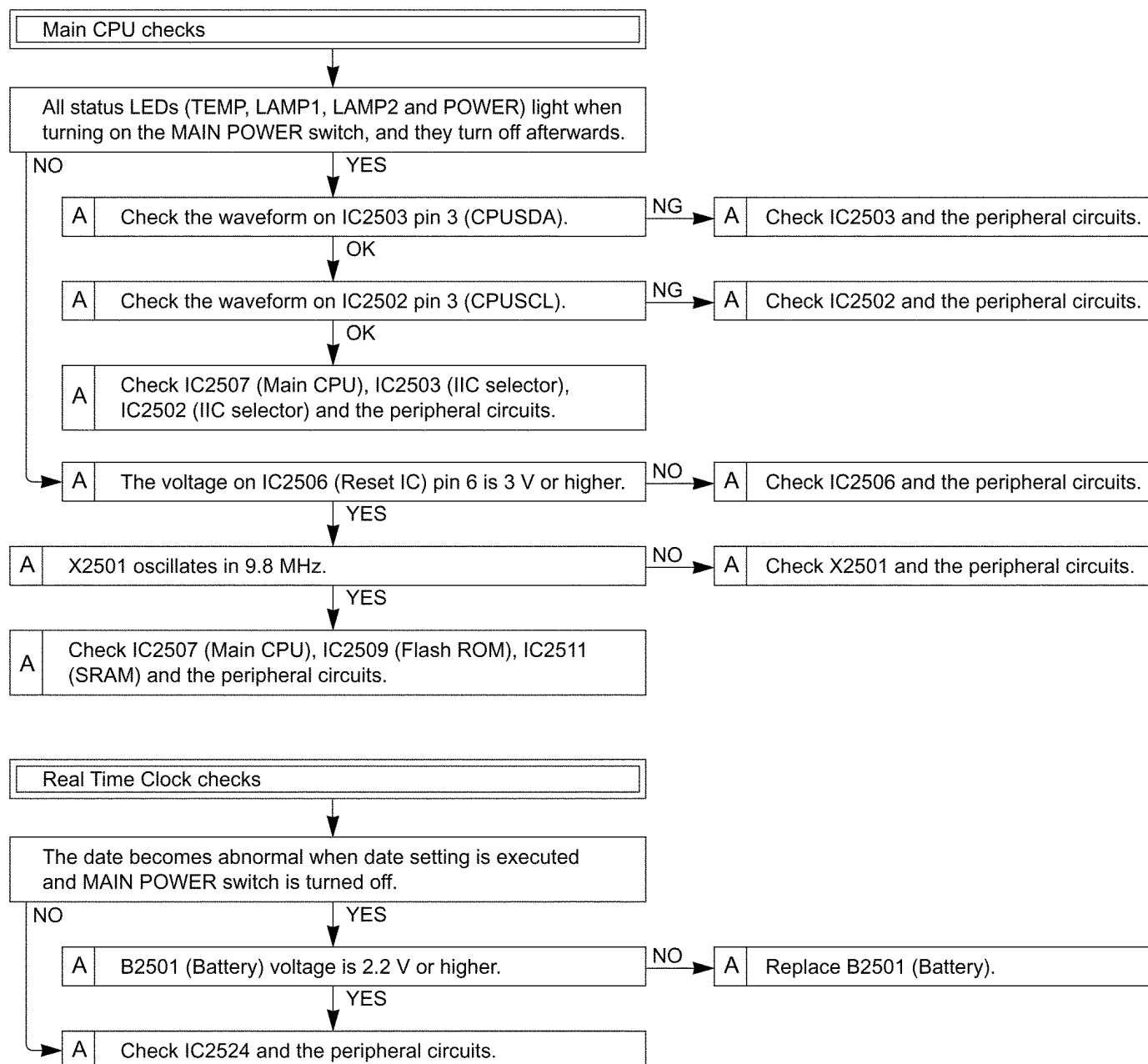


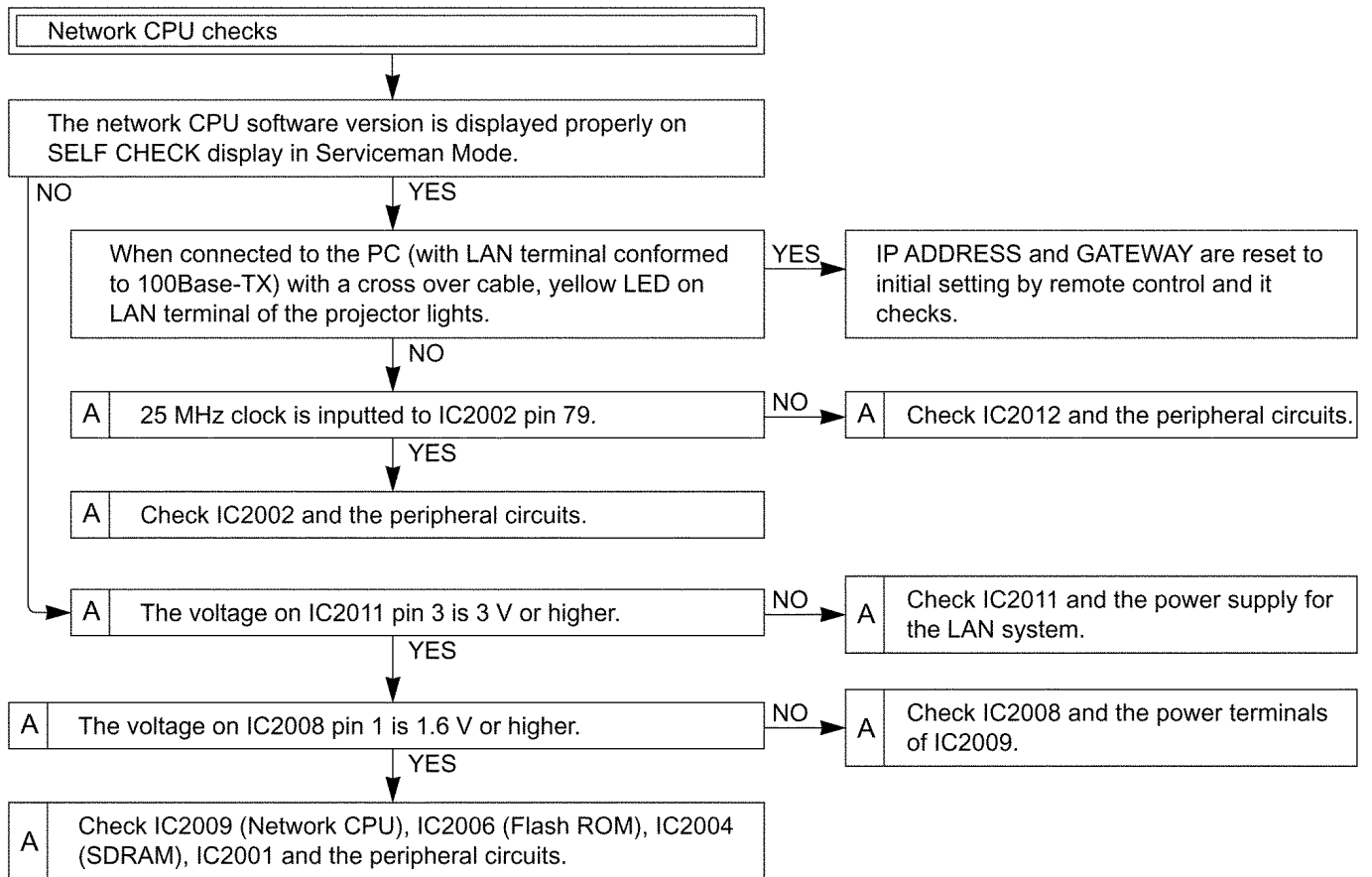


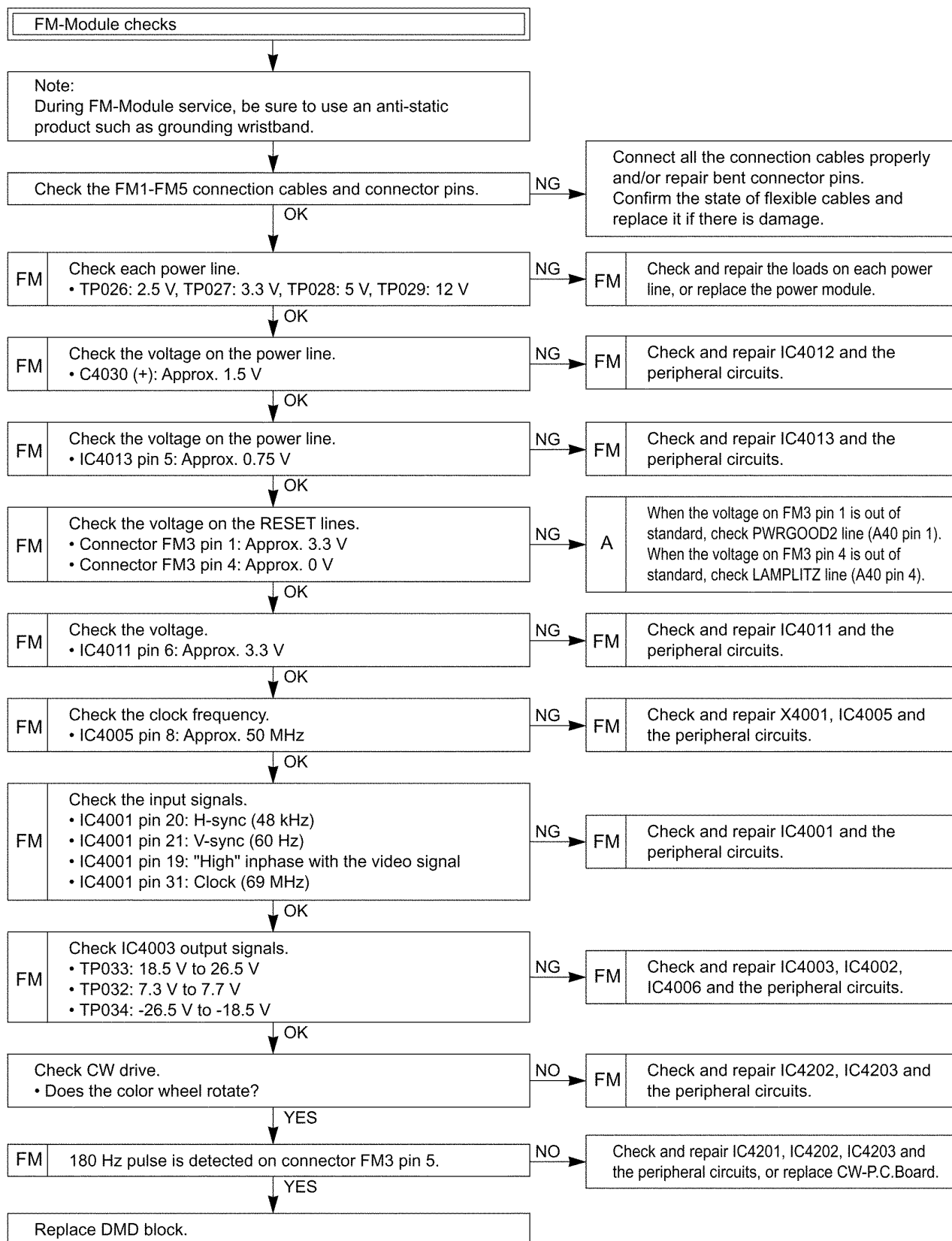


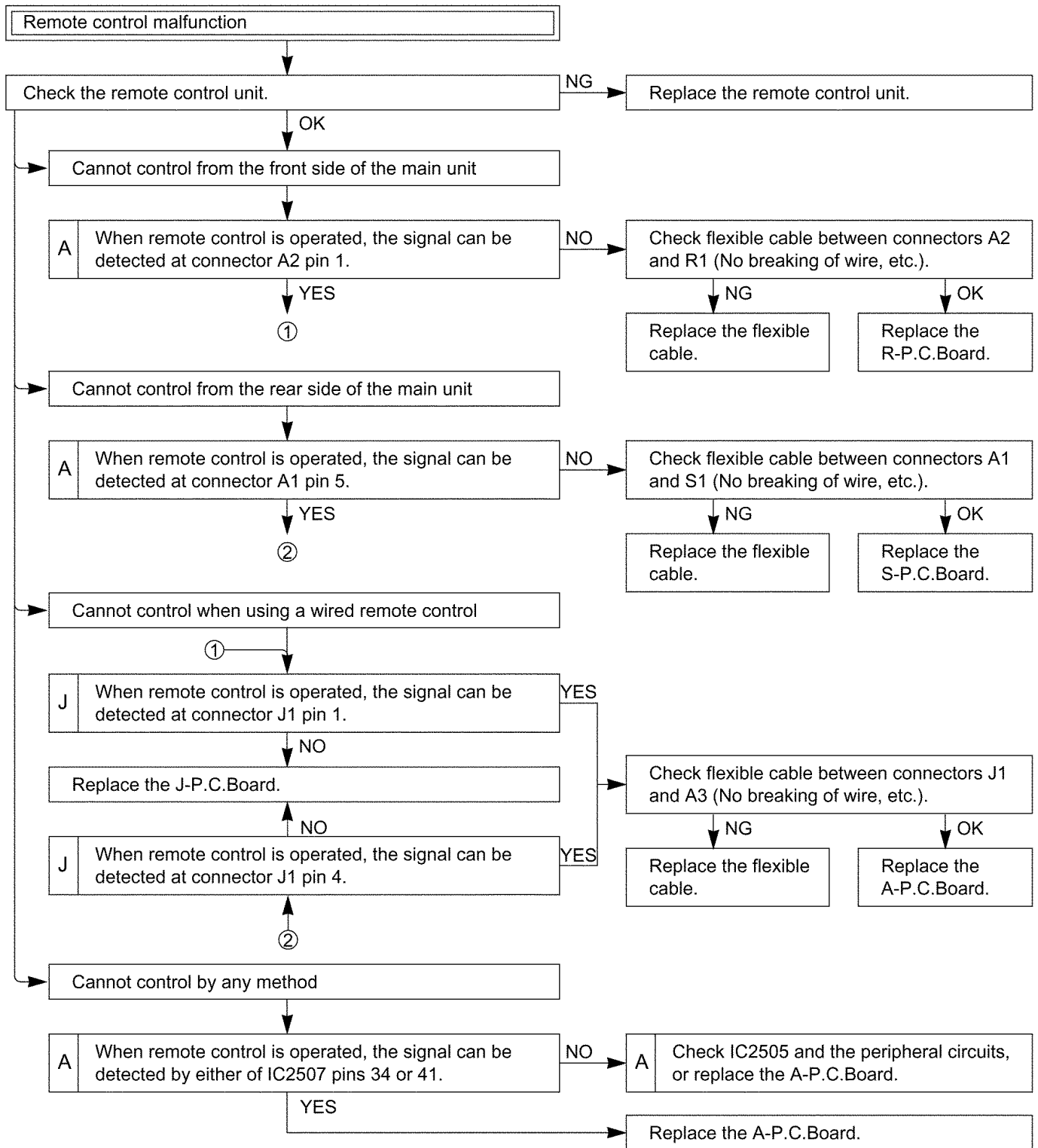


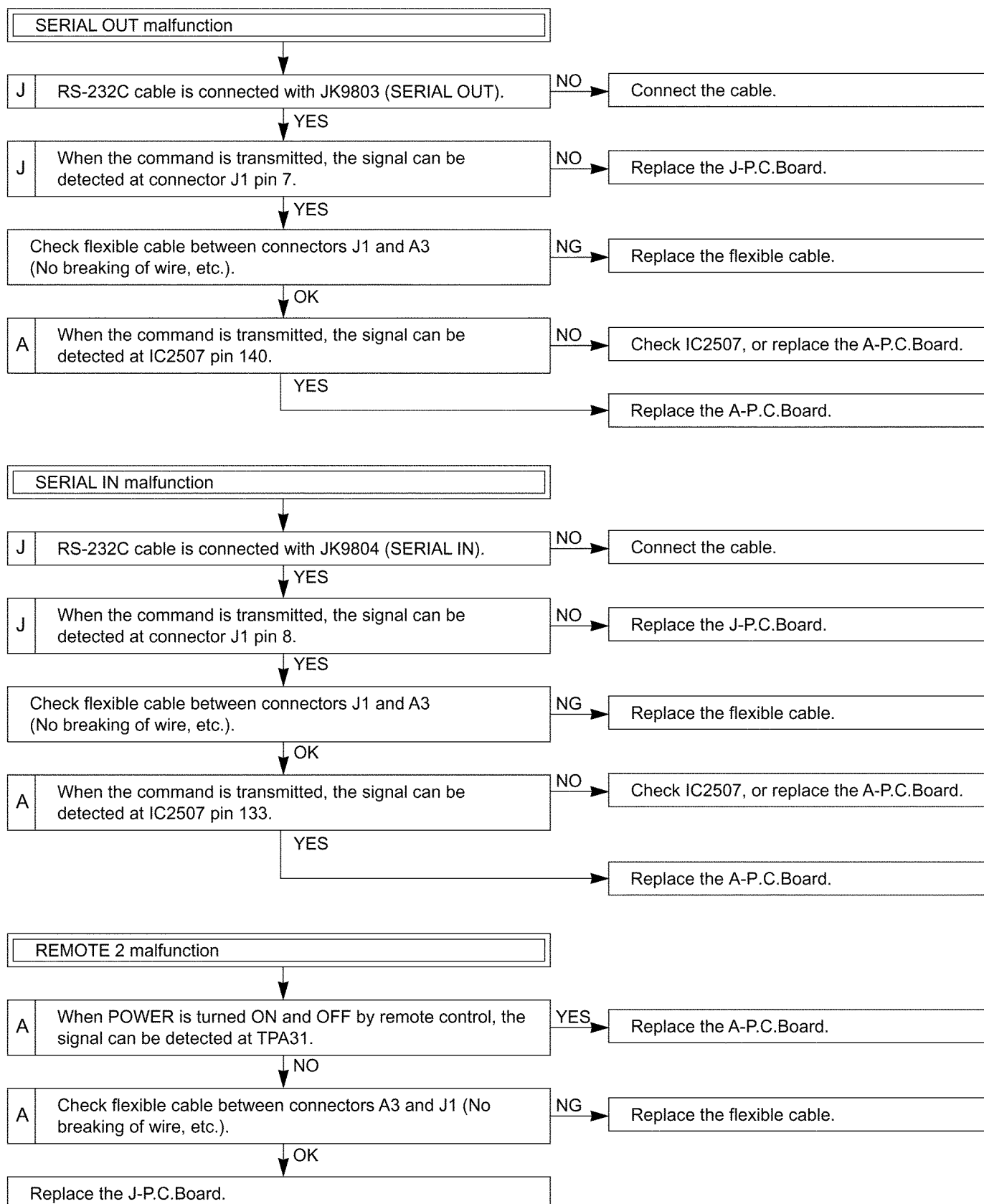


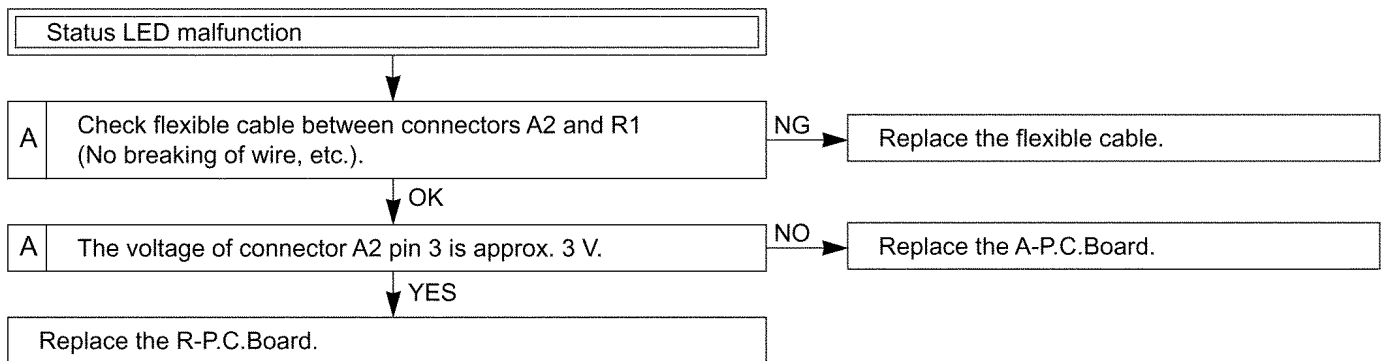
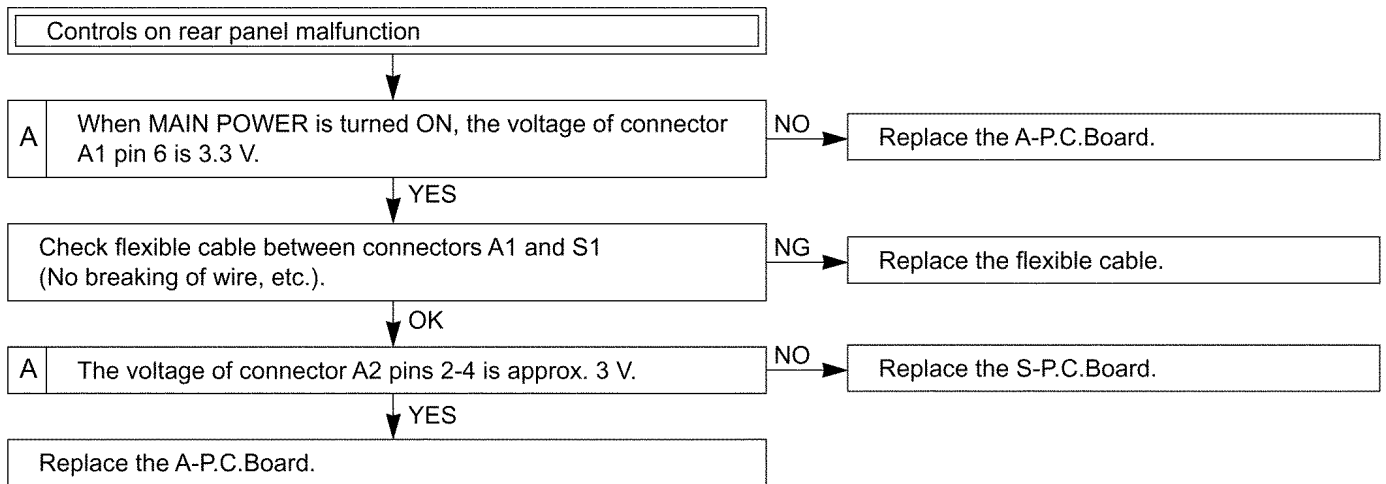










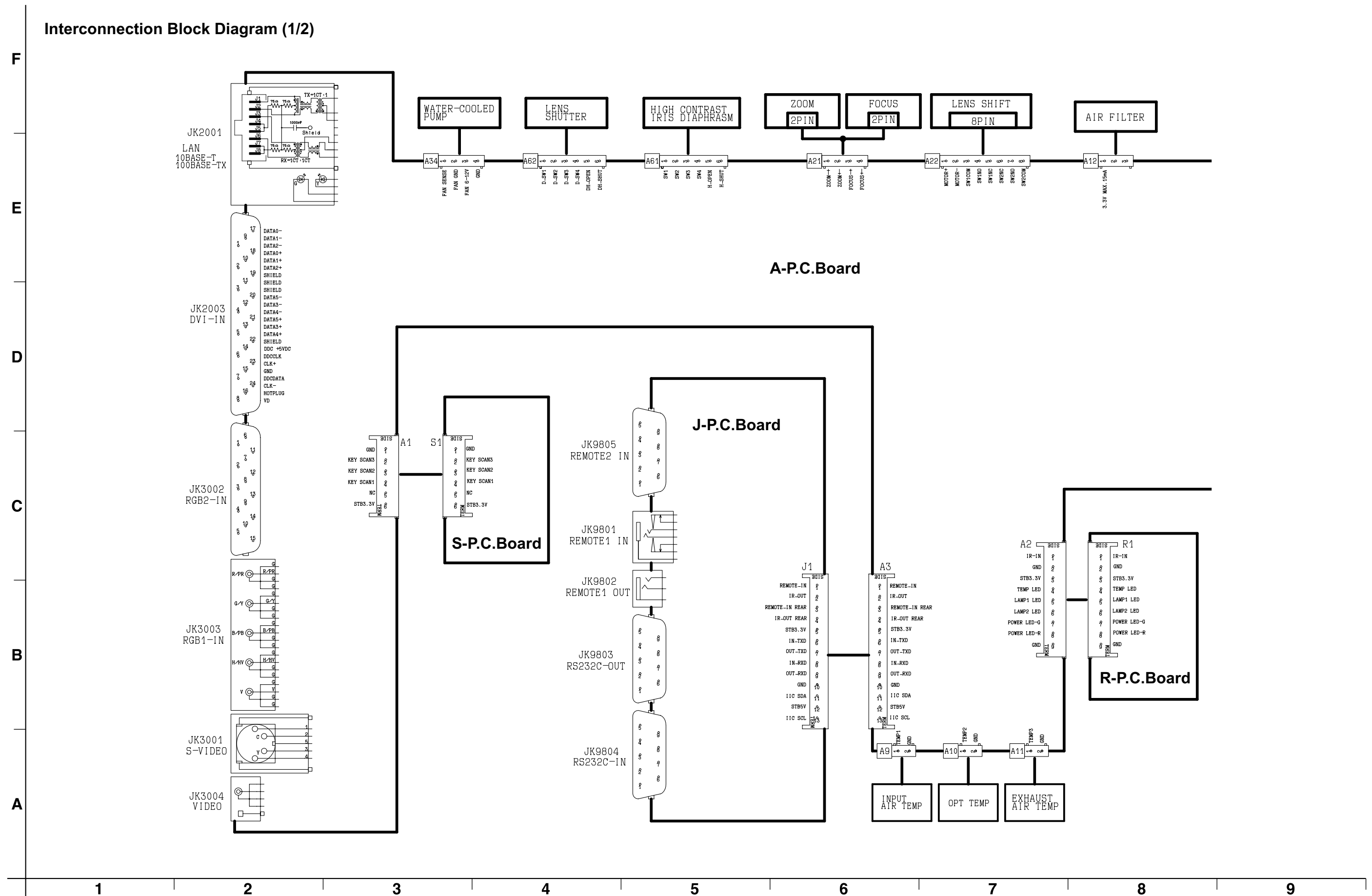




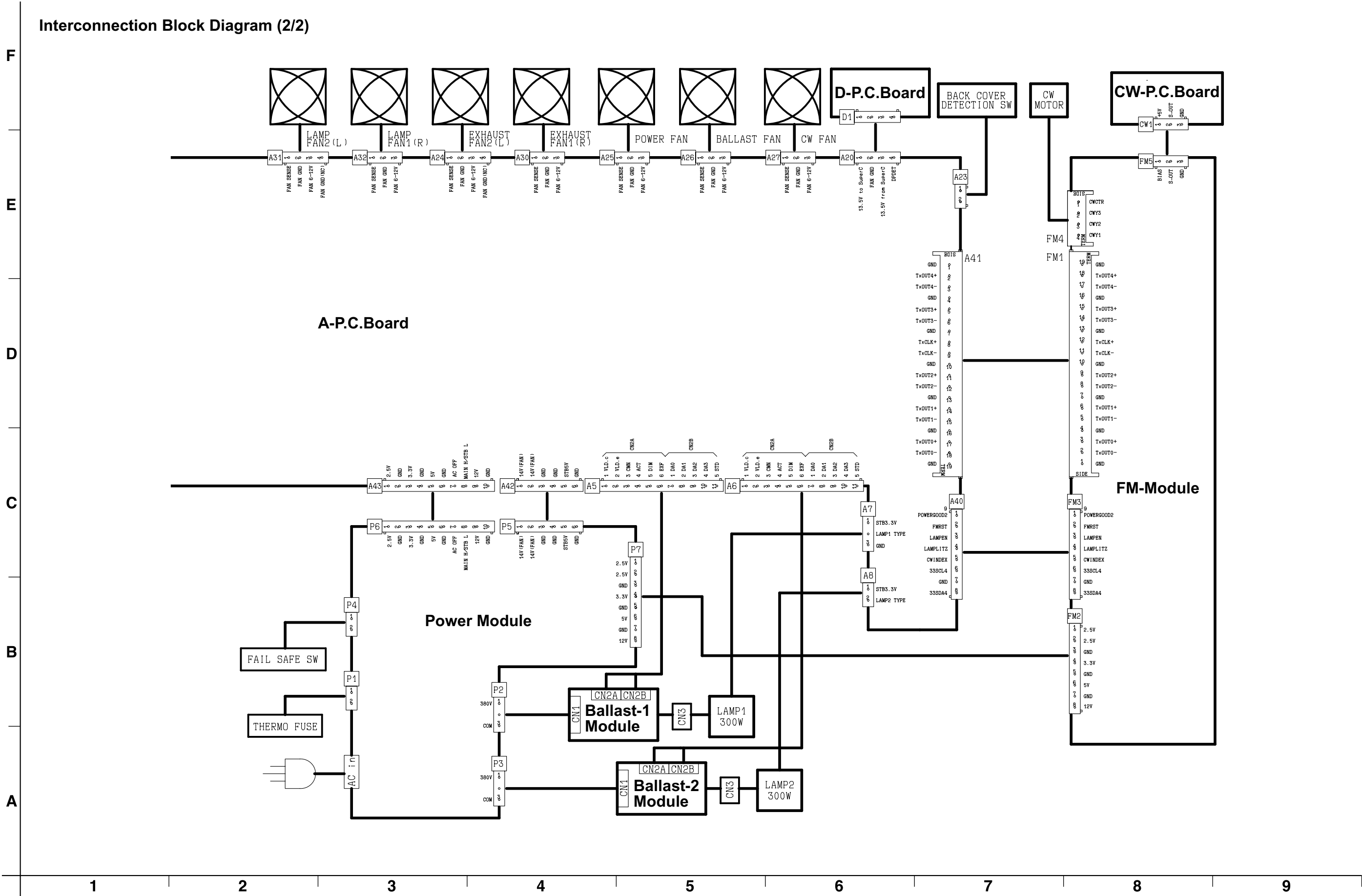


# 13 Interconnection Block Diagram

## 13.1. Interconnection Block Diagram (1/2)

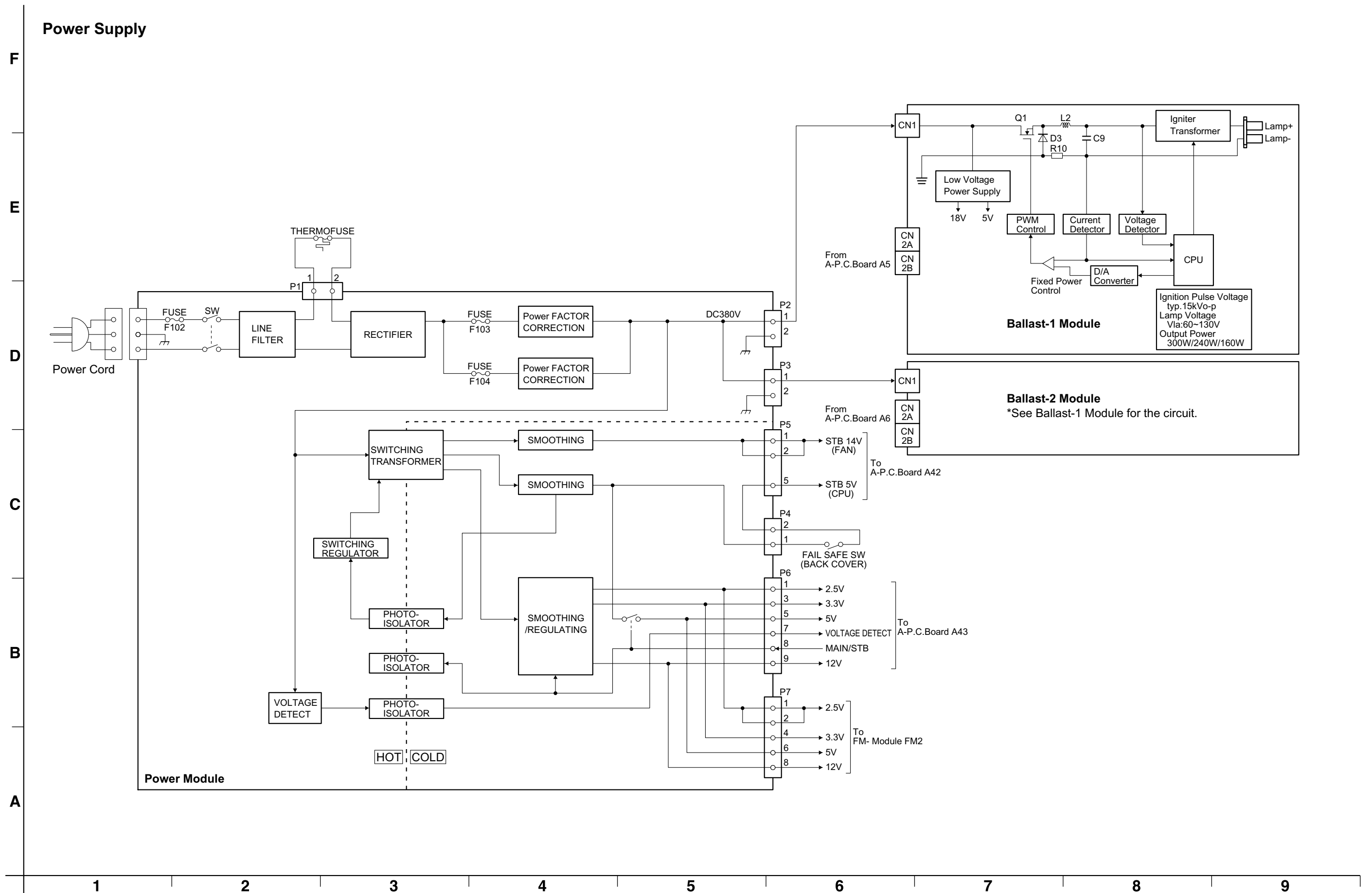


13.2. Interconnection Block Diagram (2/2)

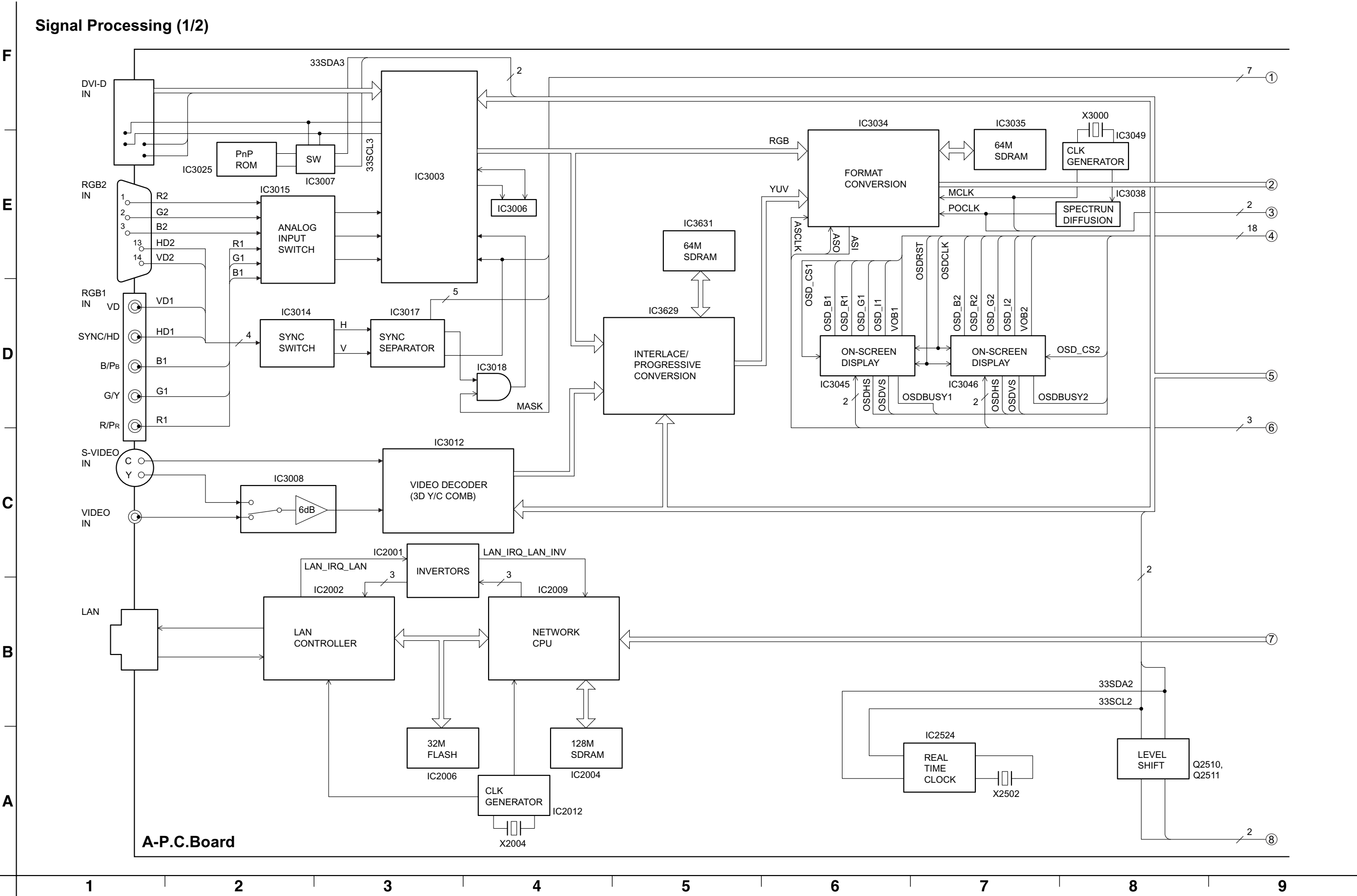


# 14 Block Diagram

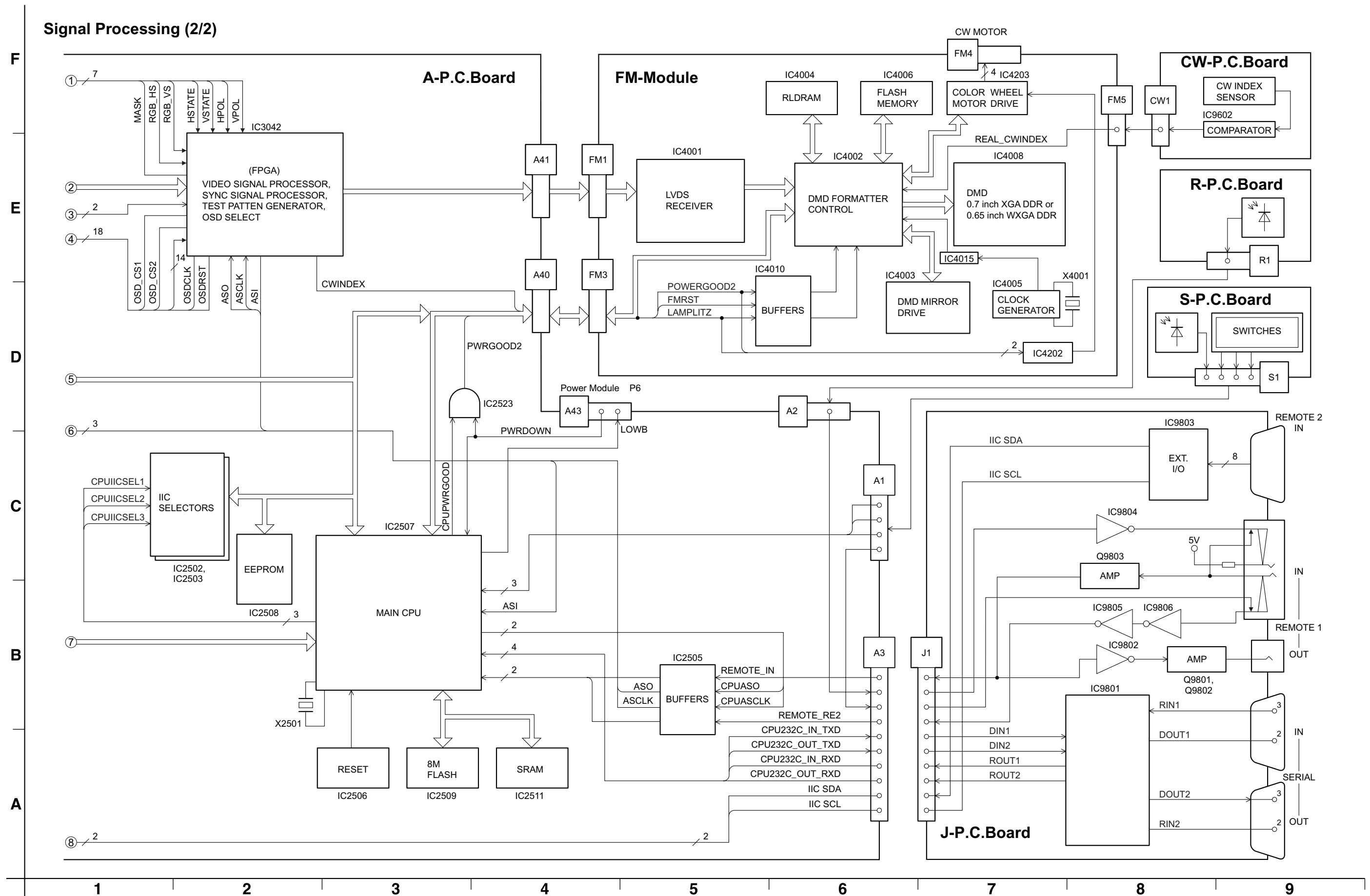
## 14.1. Power Supply



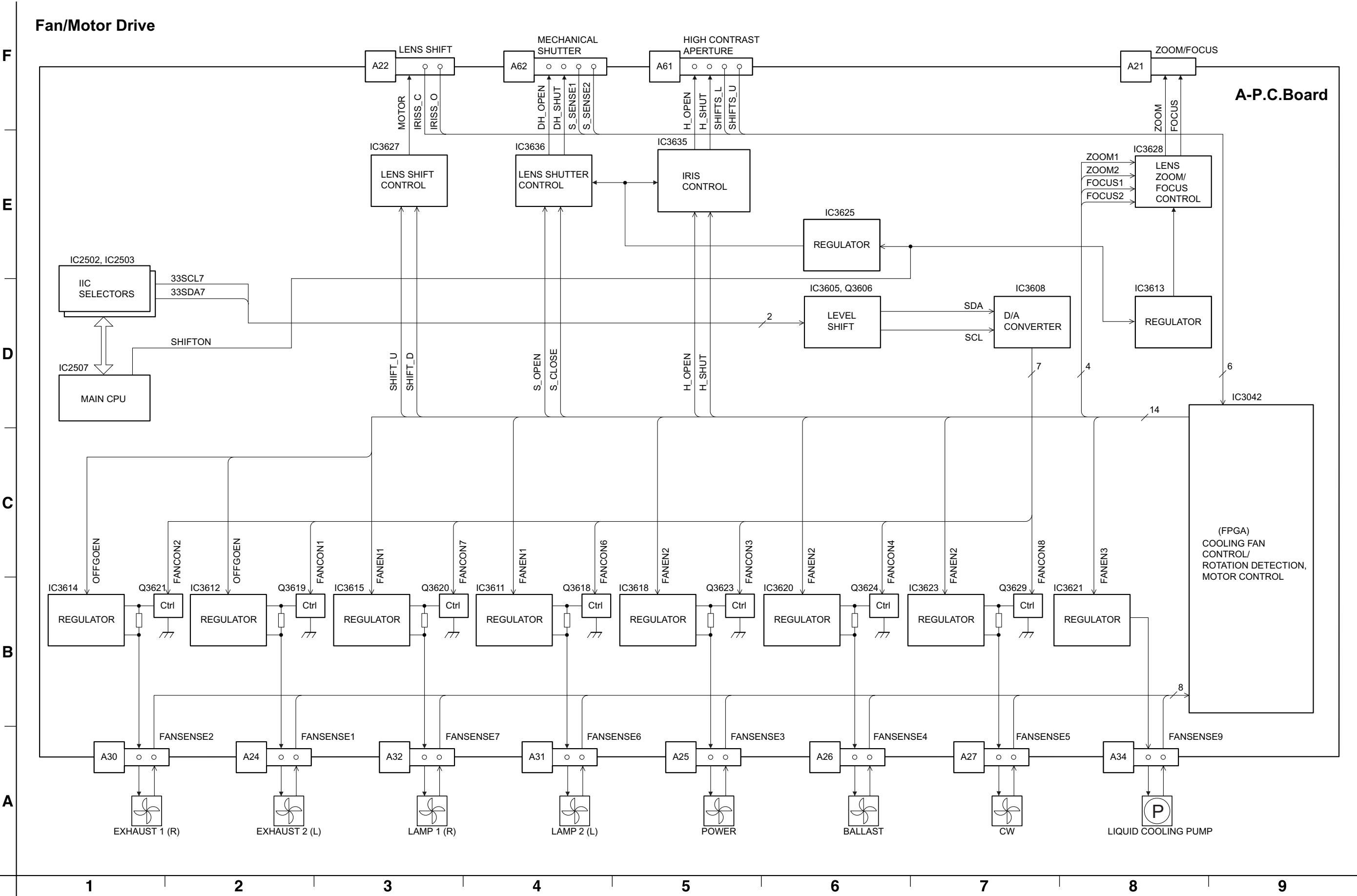
14.2. Signal Processing (1/2)



### 14.3. Signal Processing (2/2)



14.4. Fan/Motor Drive




# 15 Schematic Diagram

## Schematic Diagram for Model PT-D5600U/UL, PT-DW5000U/UL

**IMPORTANT SAFETY NOTICE**  
THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

## Schematic Diagram for Model PT-D5600E/EL, PT-DW5000E/EL

**Important Safety Notice**  
Components identified by the international symbol  have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified ones.









Notes:

1. **Resistor**

All the resistors are carbon 1/4W resistors, unless marked as follows: The unit of resistance is an OHM [ $\Omega$ ] (K=1 000 M=1 000 000).

-  : Nonflammable
-  : Metal Oxide
-  : Solid
-  : Metal Film
-  : Wire Wound
-  : Fuse


2. **Capacitor**

-  : Temperature Compensation
-  : Electrolytic
-  : Polyester
-  : Bipolar
-  : Metalized Polyester
-  : Dipped Tantalum
-  : Polypropylene
-  : Z-Type

3. **Coil**

The unit of inductance is a H, unless otherwise noted.





4. **Test Point**

-  : Test Point

5. **Voltage Measurement**

The voltage is measured by an electronic voltmeter receiving the colorbar signal when all the customer's controls are set to the standard condition.

6. **Color code for the links between diagrams and circuit boards**

From/To		To/From	Color code
Block diagram		Schematic diagram	Magenta
Schematic diagram		Schematic diagram	Green
Schematic diagram		Circuit boards	Yellow
Schematic diagram		Waveforms	Cyan (Light blue)

7. **HOT and COLD indications**

The power circuit board contains a circuit area using a separate power supply to isolate the ground connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the precautions below:

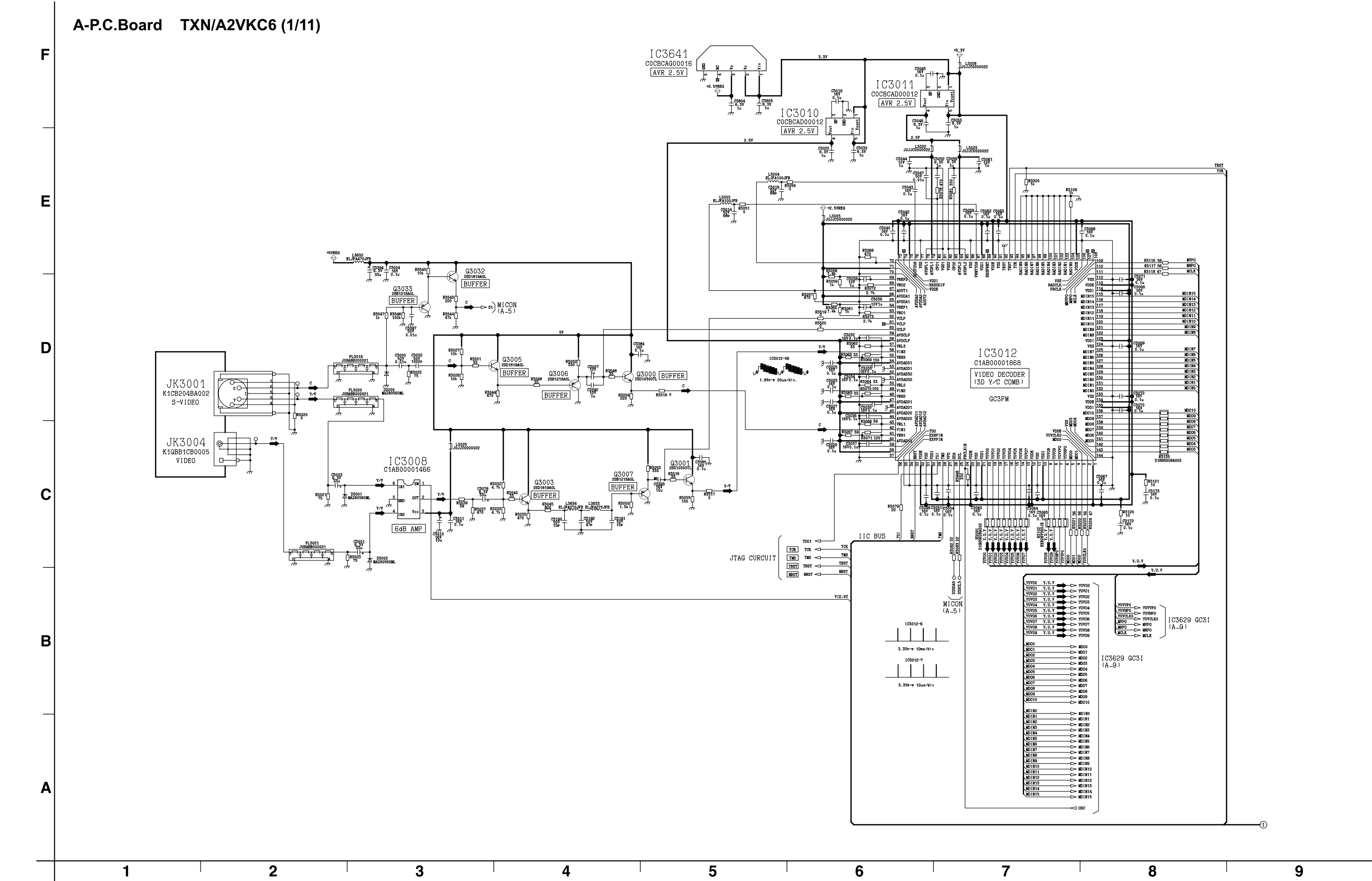
8. **This schematic diagram is the latest at the time of printing and the subject to change without notice.**

Precautions:

1. NEVER touch the HOT part or the HOT and COLD parts at the same time, or you may get an electric shock.
2. NEVER short-circuit the HOT and COLD circuits, or the fuse may blow and the parts may break.
3. NEVER connect an instrument such oscilloscope to the HOT and COLD circuit simultaneously, or the fuse may blow. Connect the ground of instruments to the ground of the circuit being measured.
4. MAKE SURE to unplug the power cord from the power outlet before removing the chassis.

15.1. A-P.C.Board (1/11)

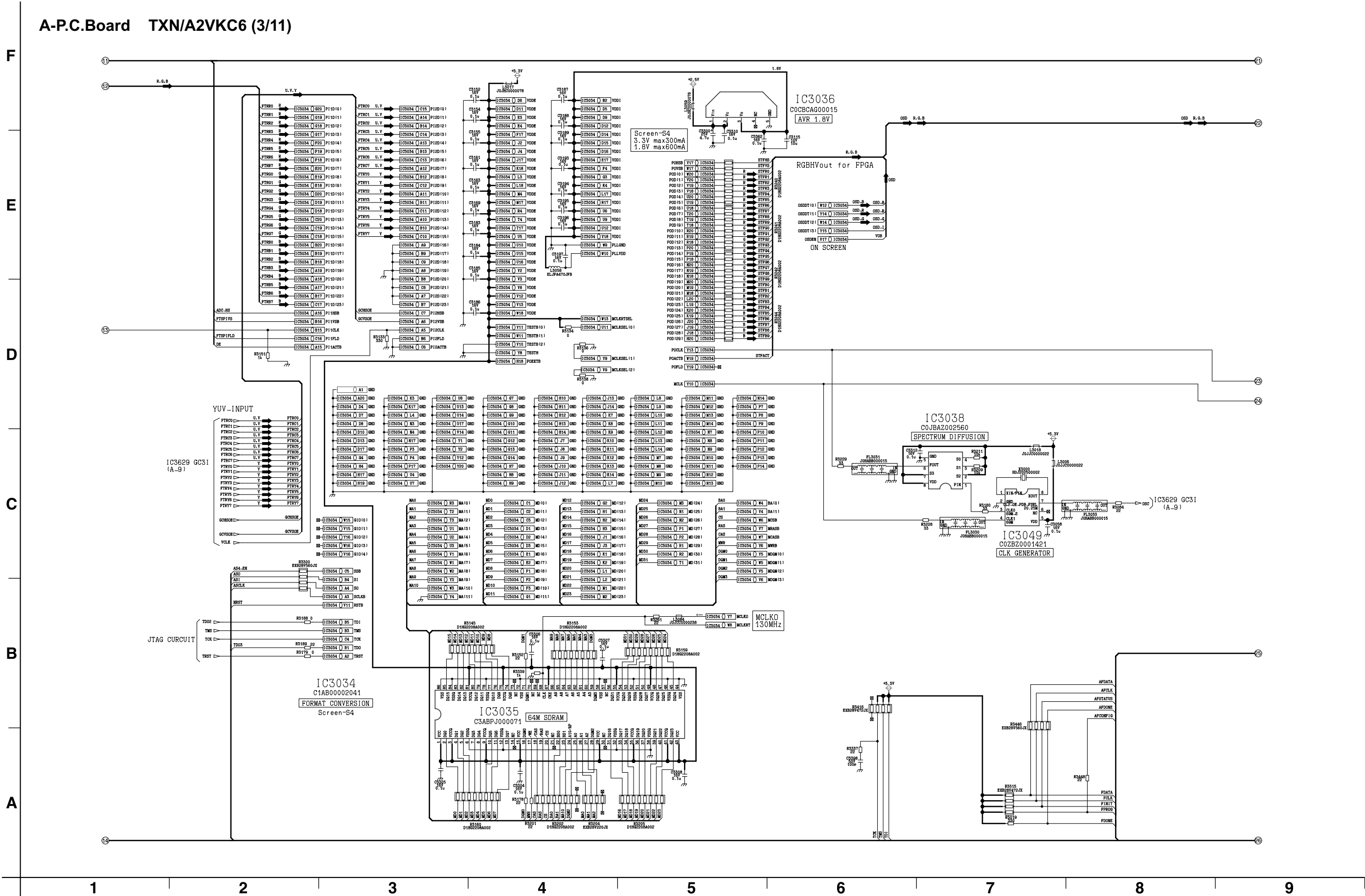
A-P.C.Board TXN/A2VKC6 (1/11)





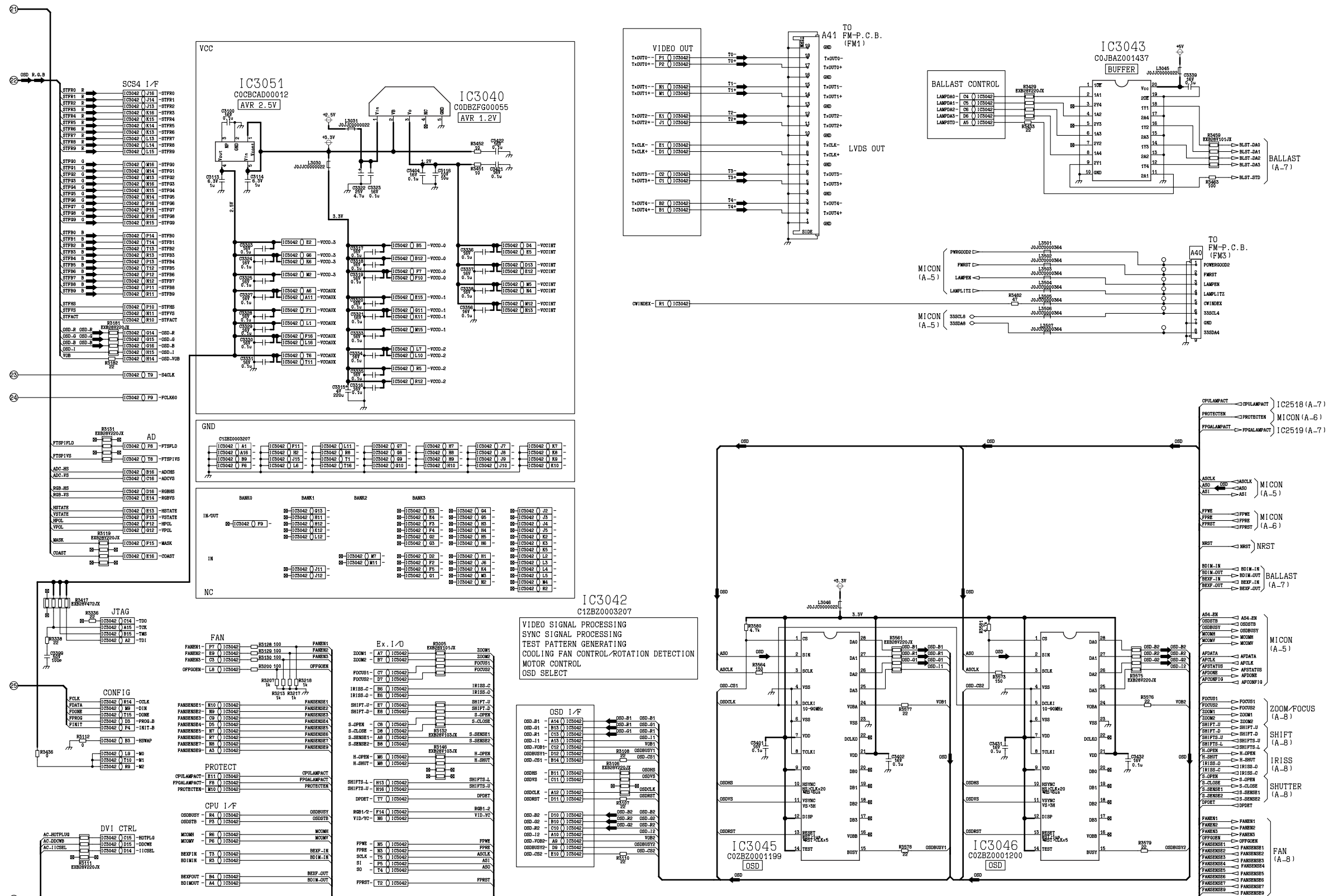


15.3. A-P.C.Board (3/11)

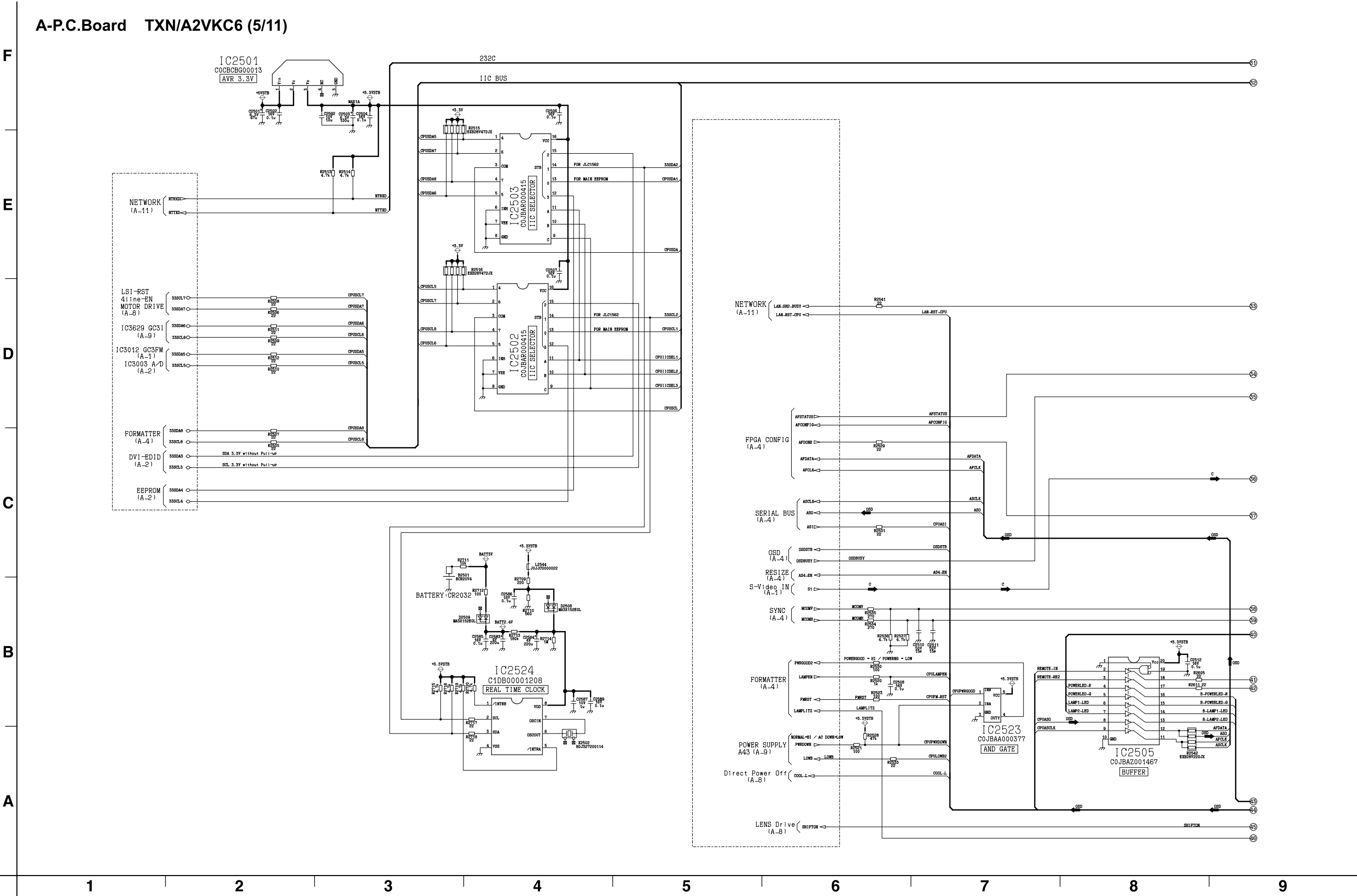


#### 15.4. A-P.C.Board (4/11)

**A-P.C.Board TXN/A2VKC6 (4/11)**



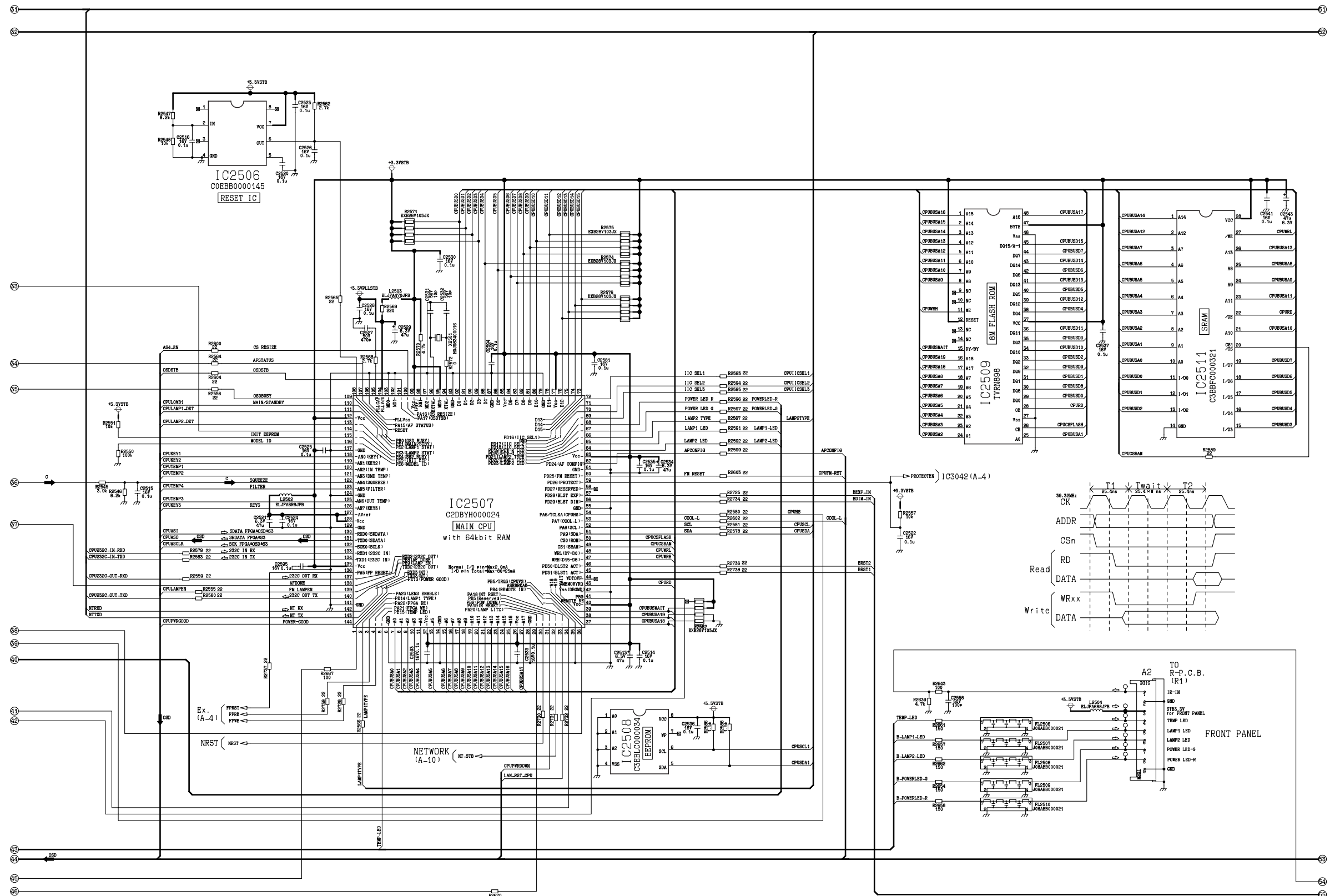
15.5. A-P.C.Board (5/11)





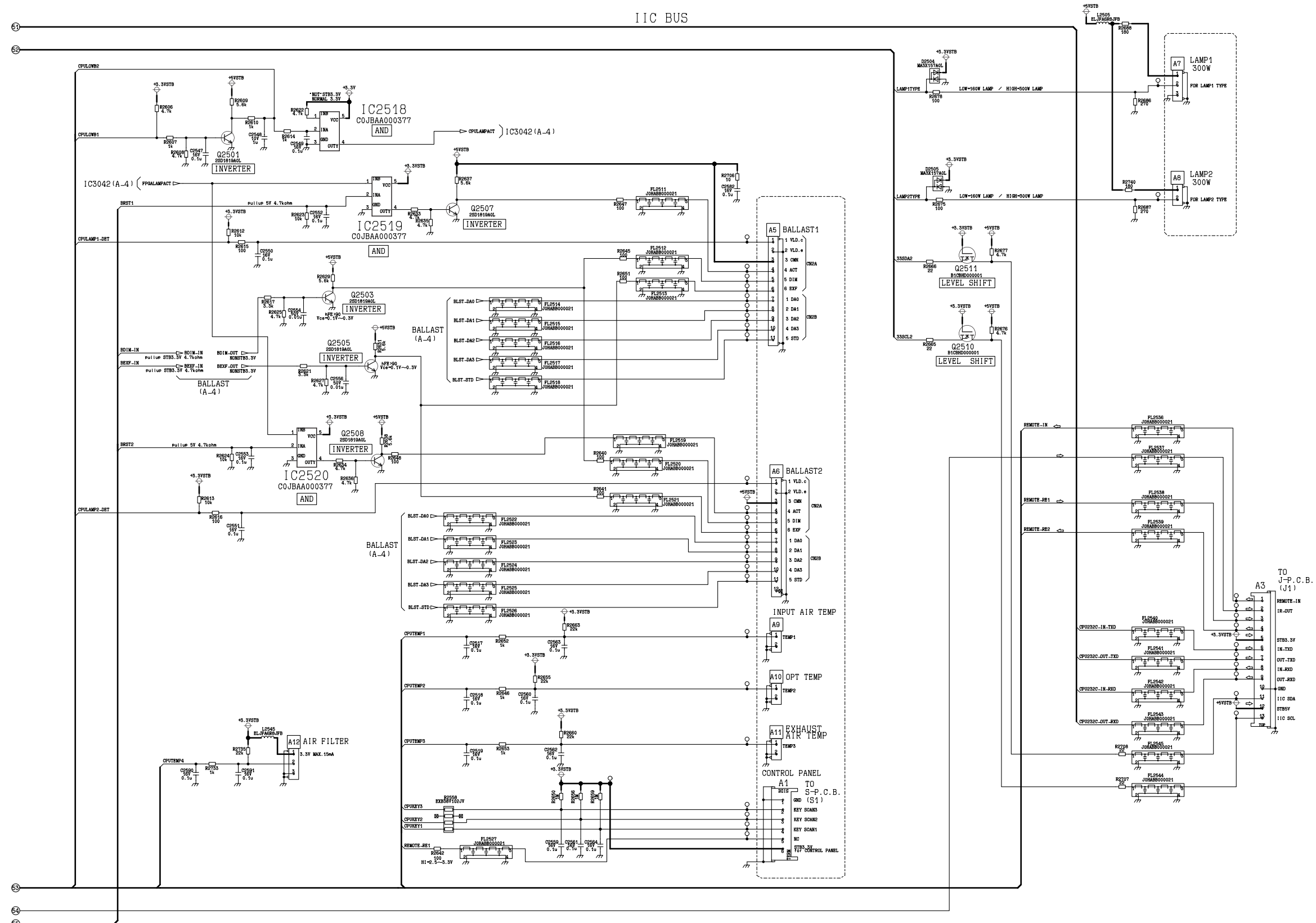
## 15.6. A-P.C.Board (6/11)

**A-P.C.Board TXN/A2VKC6 (6/11)**



### 15.7. A-P.C.Board (7/11)

**A-P.C.Board TXN/A2VKC6 (7/11)**





15.9. A-P.C.Board (9/11)

A-P.C.Board TXN/A2VKC6 (9/11)

F

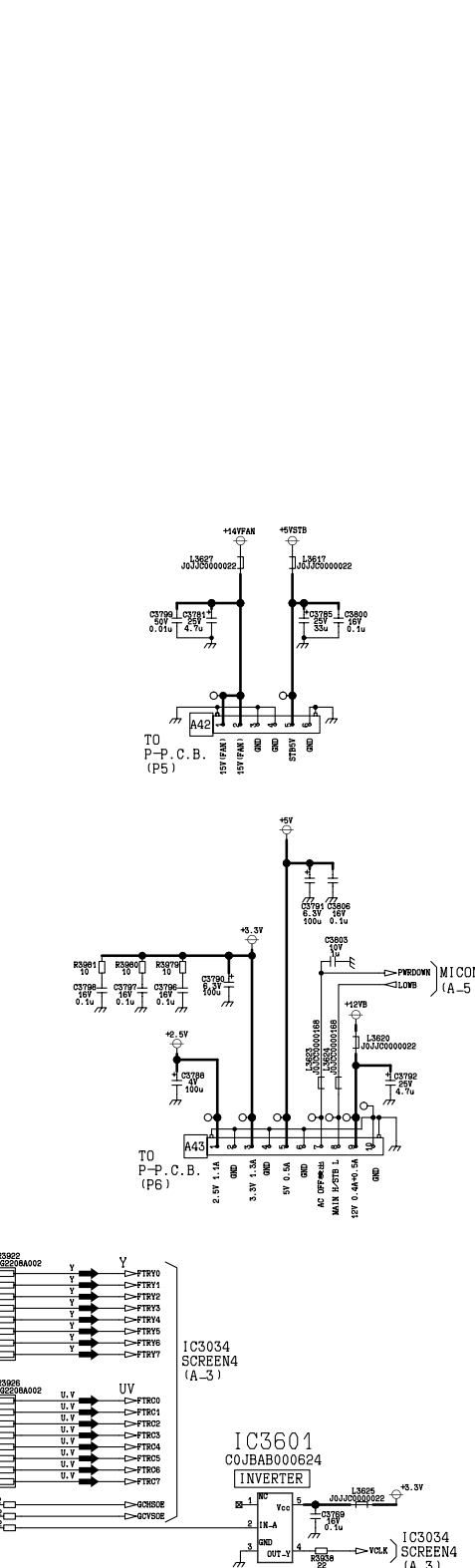
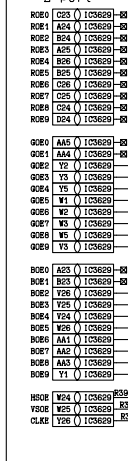
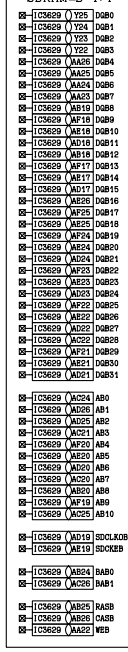
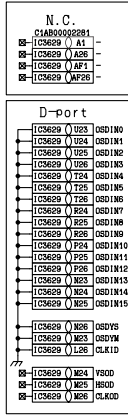
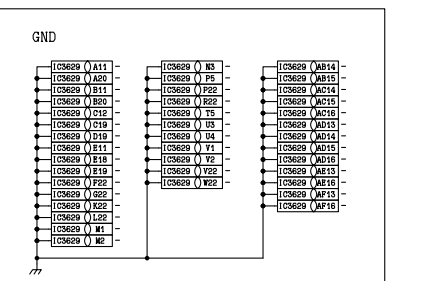
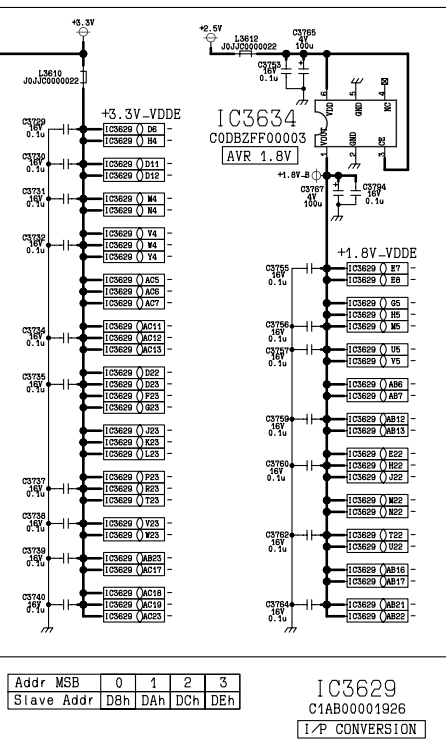
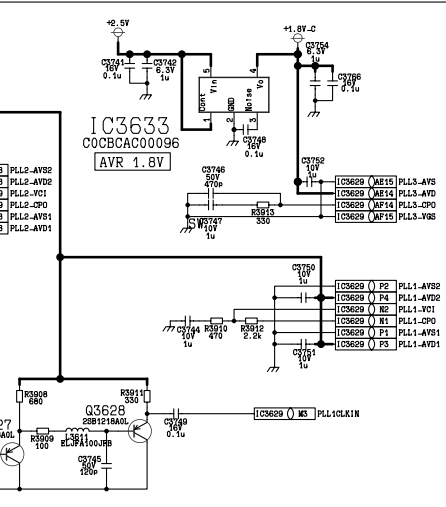
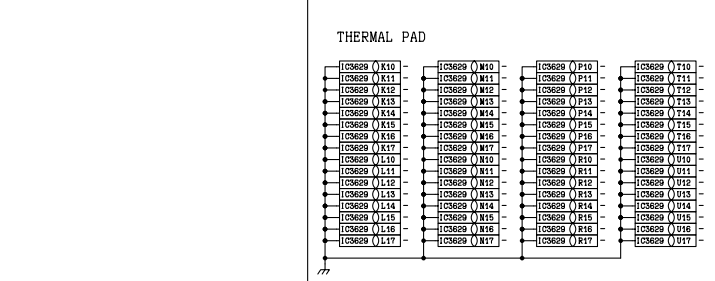
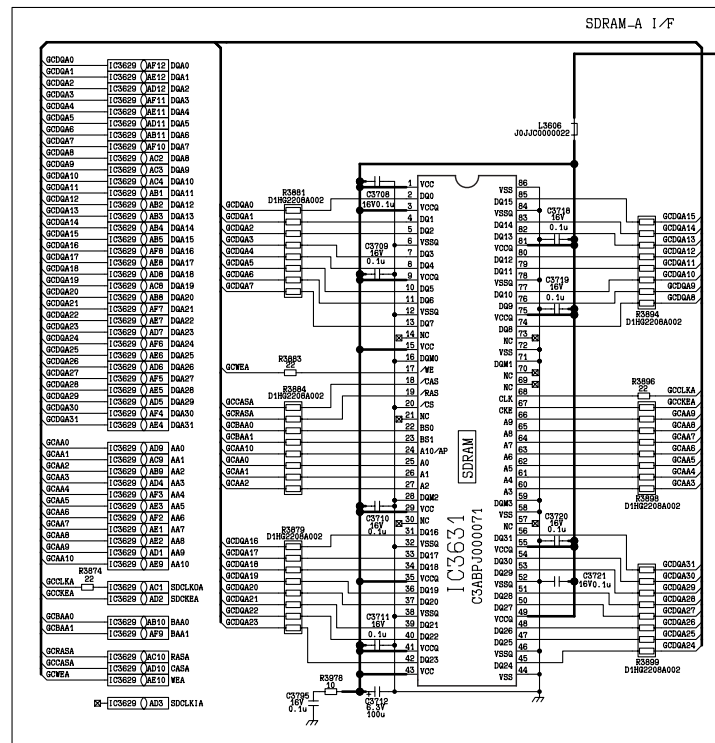
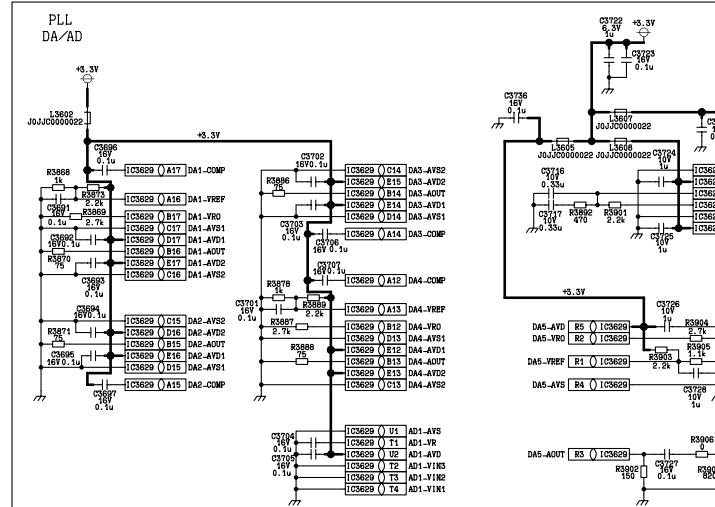
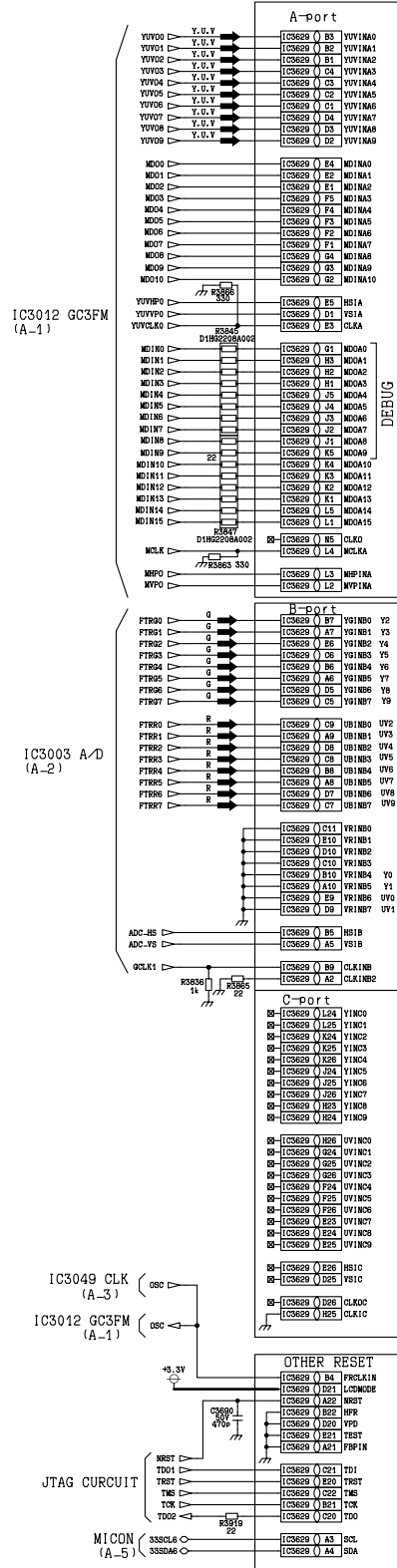
E

D

C

B

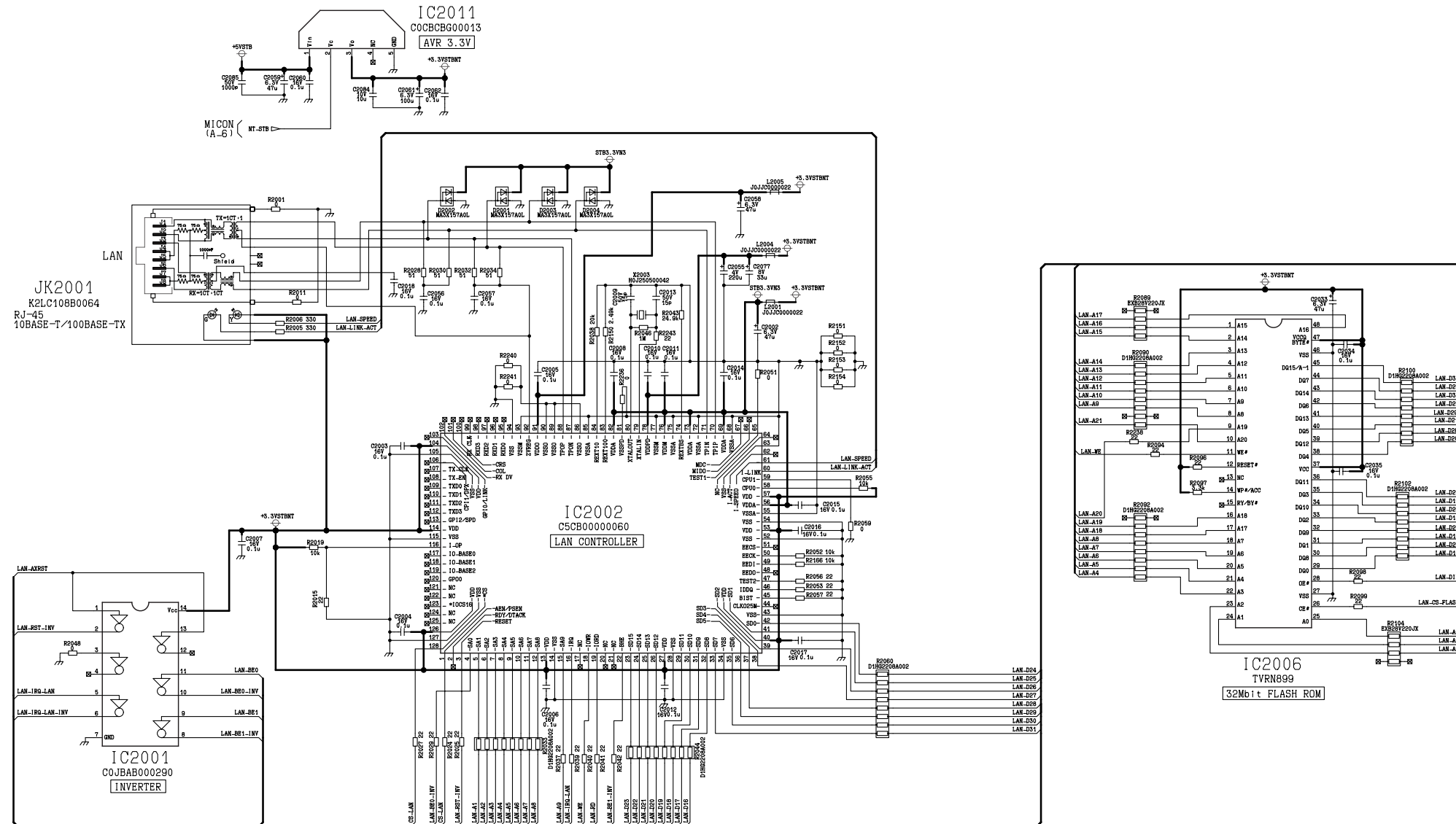
A





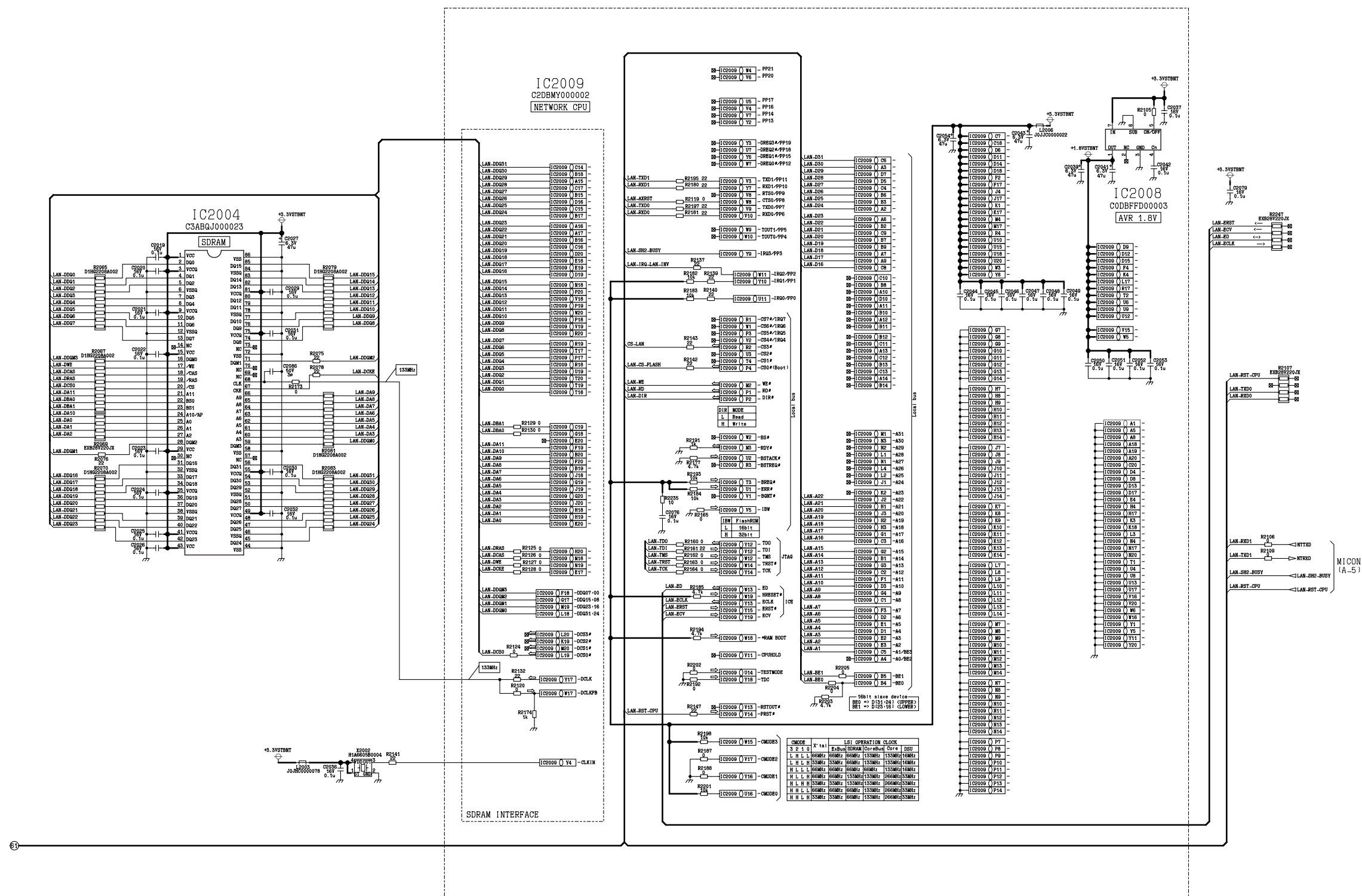
### 15.10. A-P.C.Board (10/11)

**A-P.C.Board TXN/A2VKC6 (10/11)**



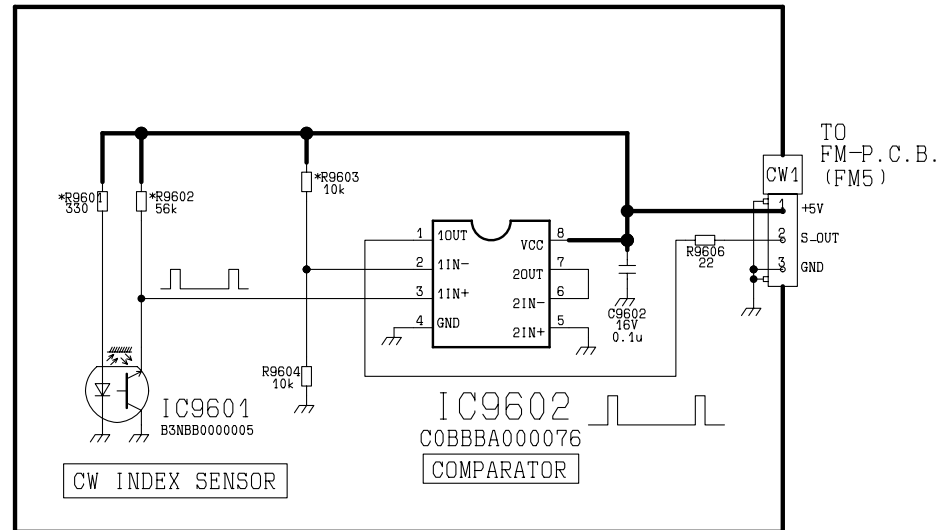
### 15.11. A-P.C.Board (11/11)

**A-P.C.Board TXN/A2VKC6 (11/11)**

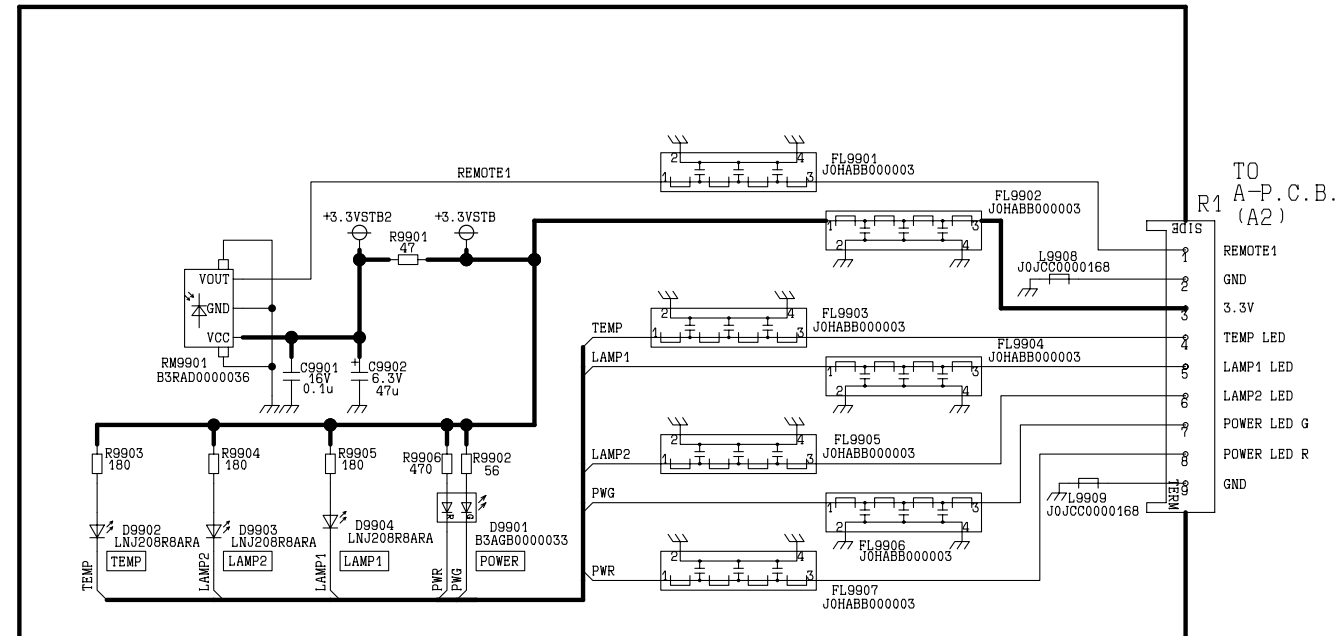


## 15.12. CW/D/R/S-P.C.Board

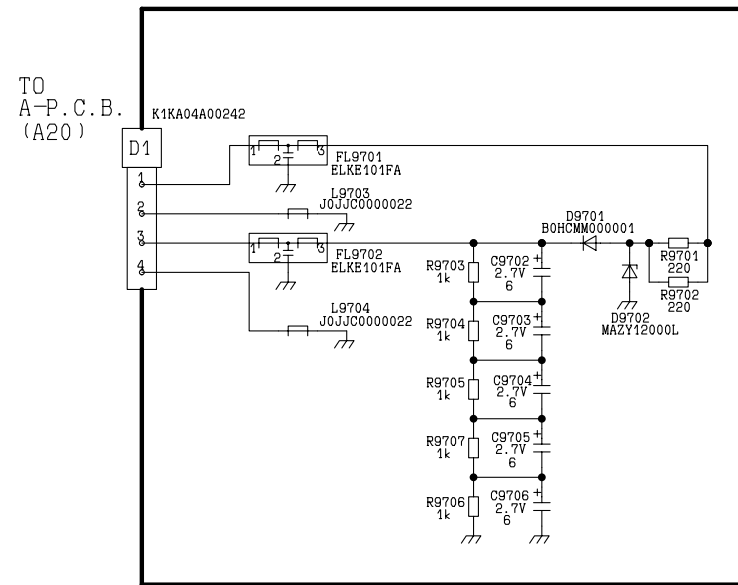
CW-P.C.Board TXNCW1VKC6



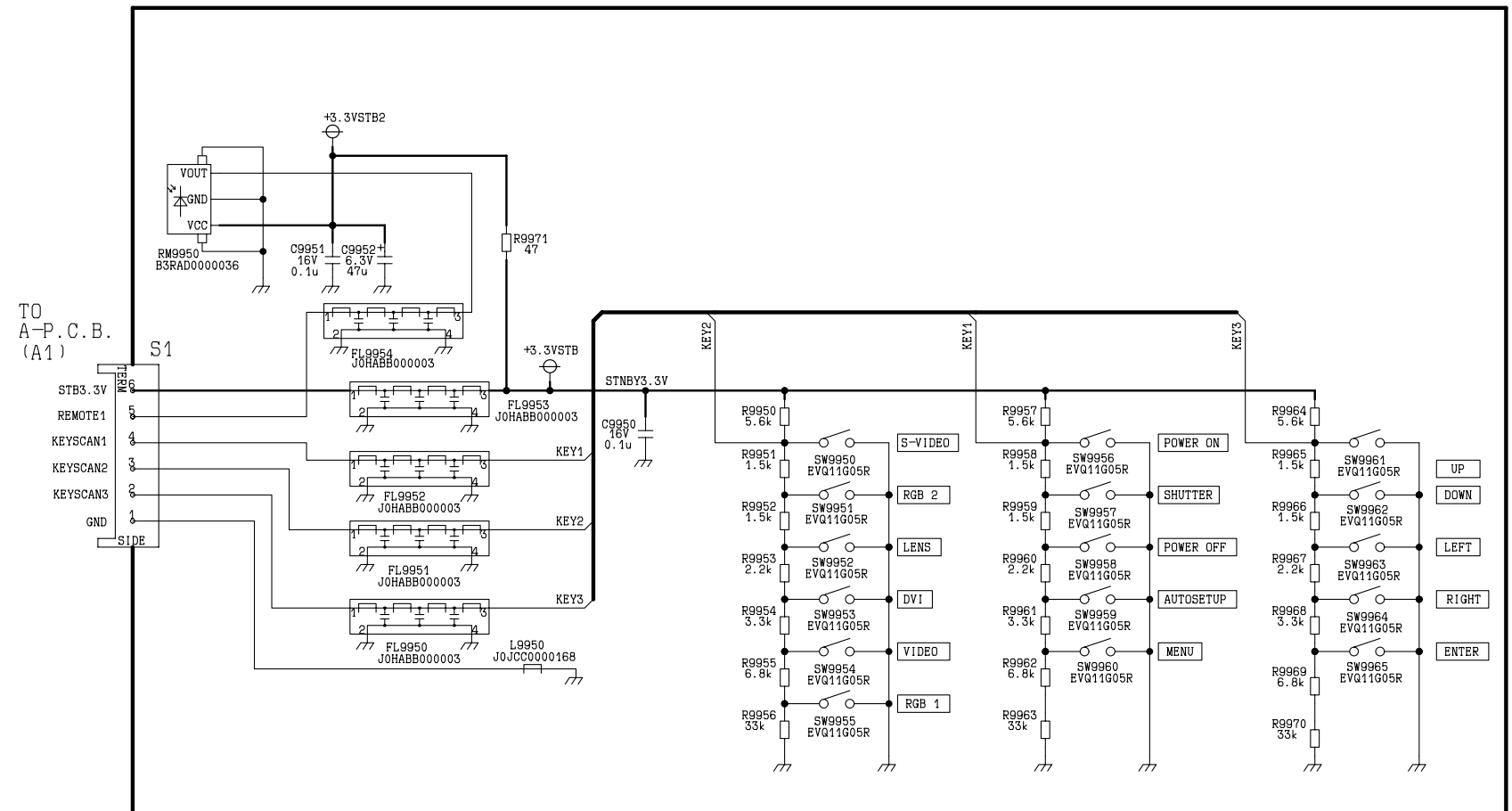
R-P.C.Board TXN/R1VJW2-R



D-P.C.Board TXN/D1VJW2



S-P.C.Board TXN/S2VJW2-R



15.13. J-P.C.Board

J-P.C.Board TXN/J1VJW2-R

F

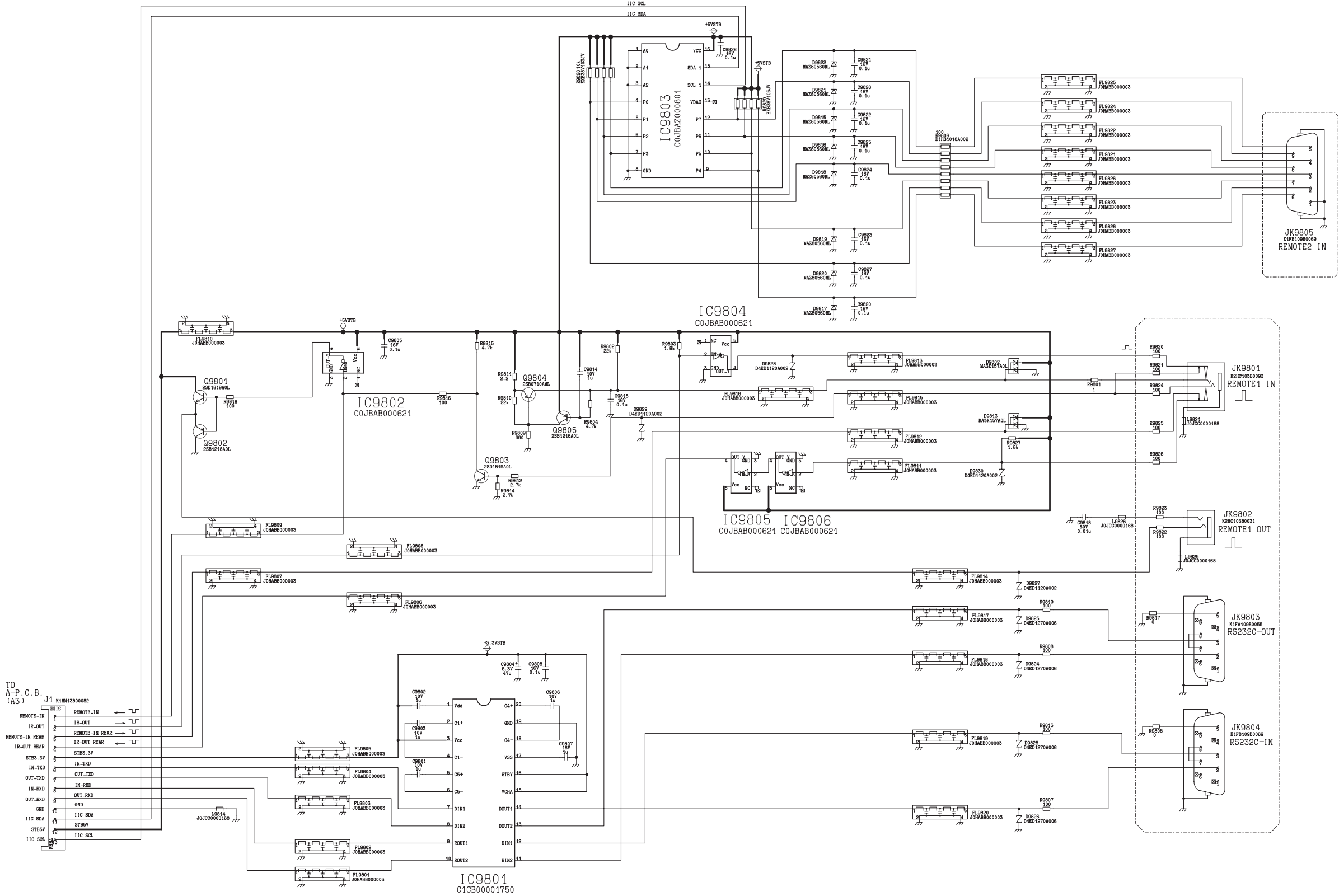
E

D

C

B

A

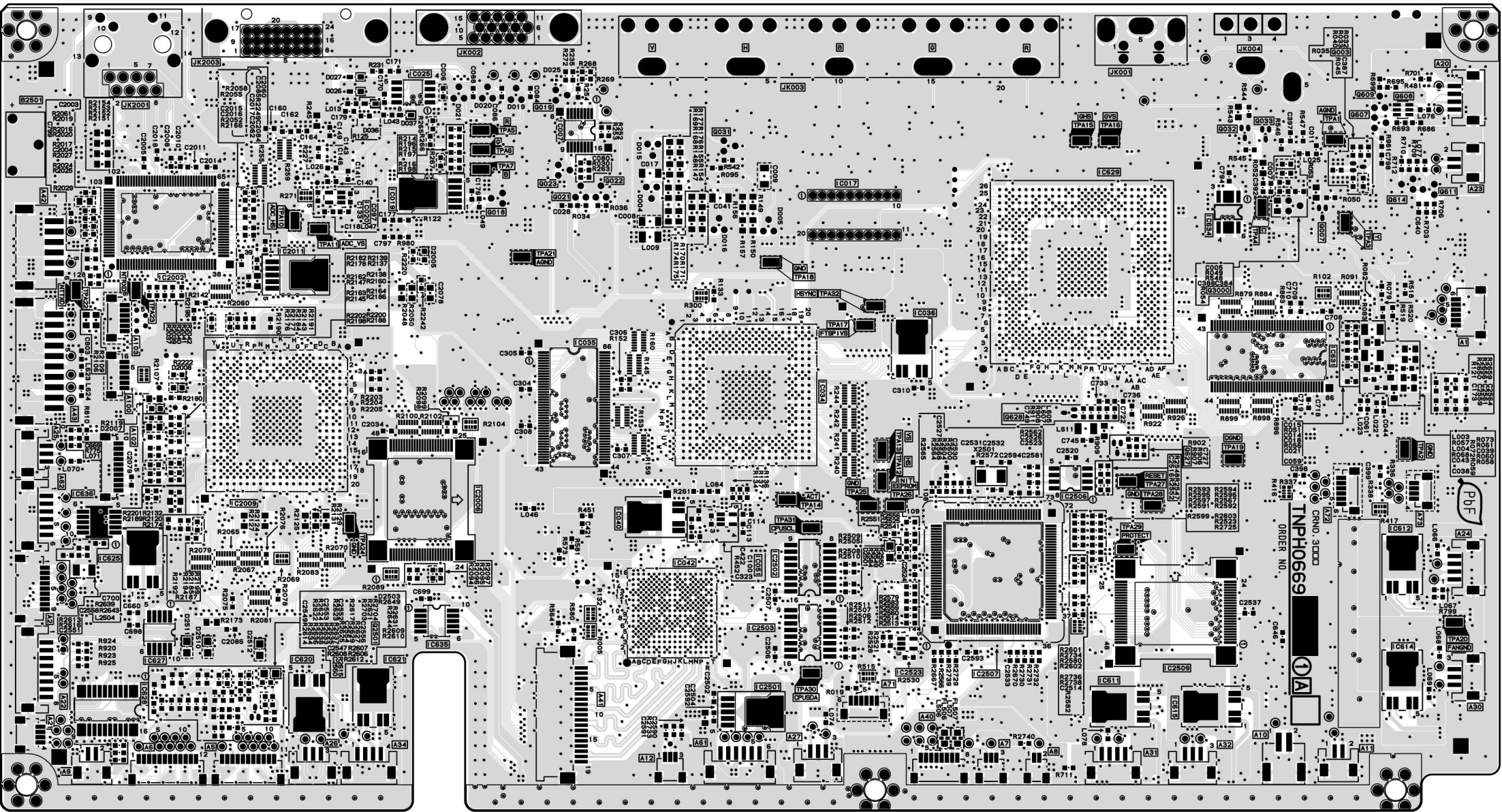


1 2 3 4 5 6 7 8 9

16 Circuit Boards

16.1. A-P.C.Board (Foil Side)

A-P.C.Board TXN/A2VKC6  
(Foil Side)



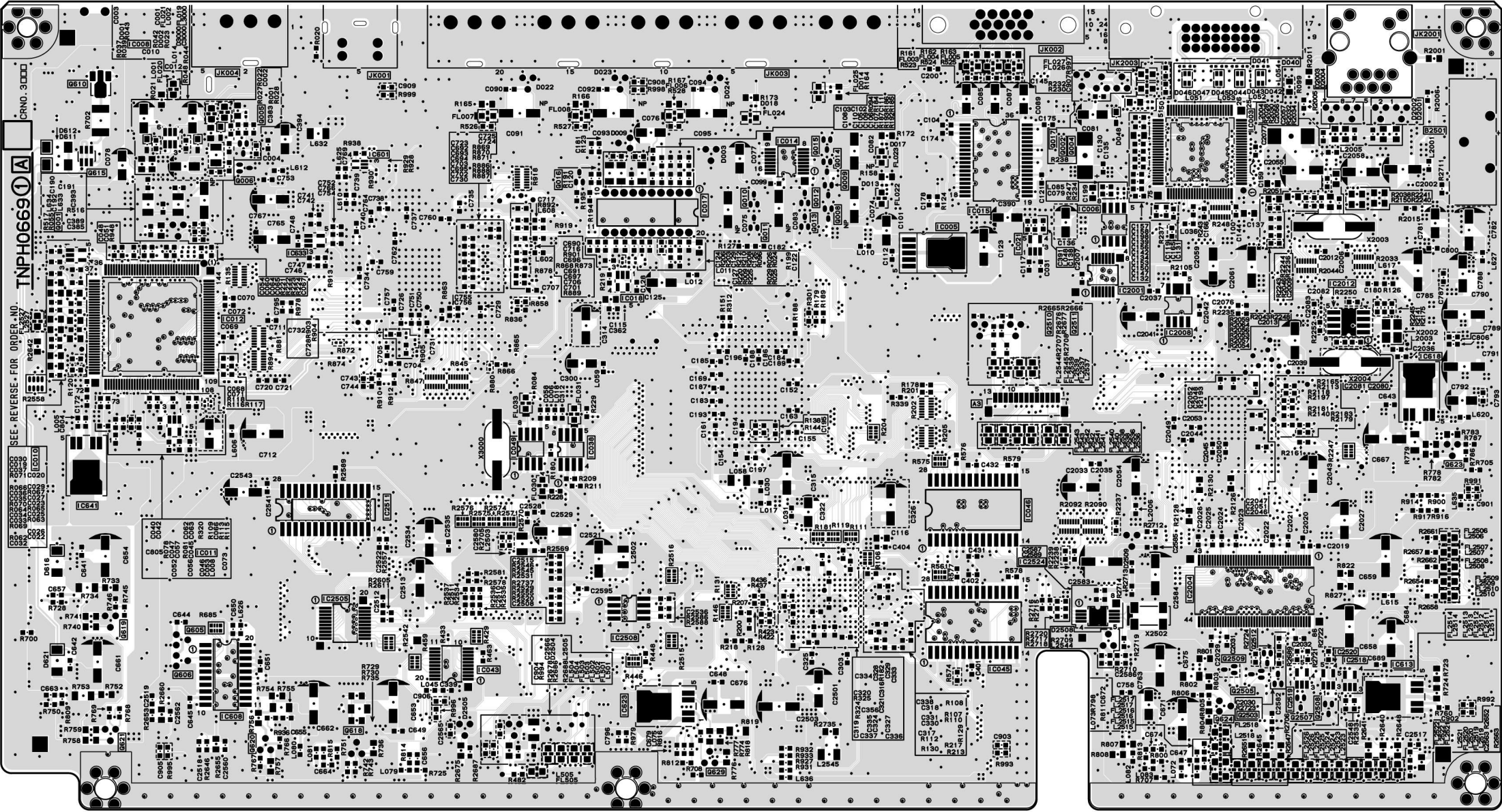
A-P.C.Board (Foil Side)									
IC									
IC2002	C-1	IC3019	D-3	IC3615	A-6				
IC2006	B-3	IC3020	D-2	IC3620	A-2				
IC2009	B-2	IC3025	D-3	IC3621	A-2				
IC2011	C-2	IC3034	C-4	IC3625	B-1				
IC2501	A-4	IC3035	C-3	IC3627	A-1				
IC2502	B-4	IC3036	C-5	IC3628	A-1				
IC2503	B-4	IC3040	B-4	IC3629	C-6				
IC2506	B-6	IC3042	B-4	IC3631	C-7				
IC2507	A-5	IC3051	B-4	IC3634	C-6				
IC2509	A-6	IC3611	A-6	IC3635	B-3				
IC2523	A-5	IC3612	B-7	IC3636	B-1				
IC3007	D-3	IC3614	A-7						
TRANSISTOR									
Q2501	A-2	Q3022	D-4	Q3609	D-7				
Q3000	C-6	Q3023	D-3	Q3611	D-7				
Q3003	D-7	Q3031	D-4	Q3614	D-7				
Q3007	C-7	Q3032	D-6	Q3627	B-6				
Q3018	C-3	Q3033	D-7	Q3628	C-5				
Q3019	D-3	Q3607	D-7						
Q3021	D-3	Q3608	D-7						
TP									
TPA1	D-7	TPA13	B-5	TPA23	C-1				
TPA2	B-7	TPA14	B-4	TPA24	B-2				
TPA3	C-7	TPA15	D-6	TPA25	B-5				
TPA4	C-7	TPA16	D-6	TPA26	B-5				
TPA5	D-3	TPA17	C-5	TPA27	B-6				
TPA6	D-3	TPA18	C-4	TPA28	B-6				
TPA7	D-3	TPA19	B-6	TPA29	B-6				
TPA10	C-2	TPA20	B-7	TPA30	A-4				
TPA11	C-2	TPA21	C-3	TPA31	B-4				
TPA12	B-5	TPA22	C-1	TPA32	C-5				

ADDRESS INFORMATION



16.2. A-P.C.Board (Component Side)

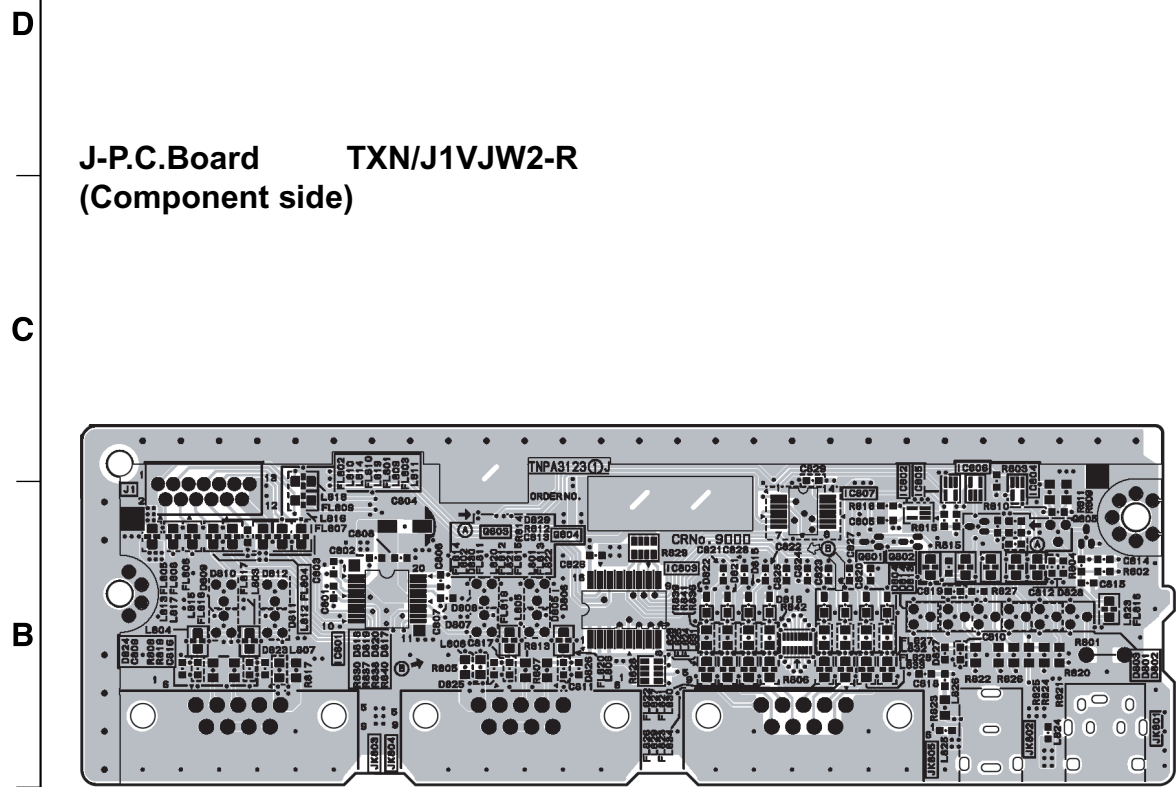
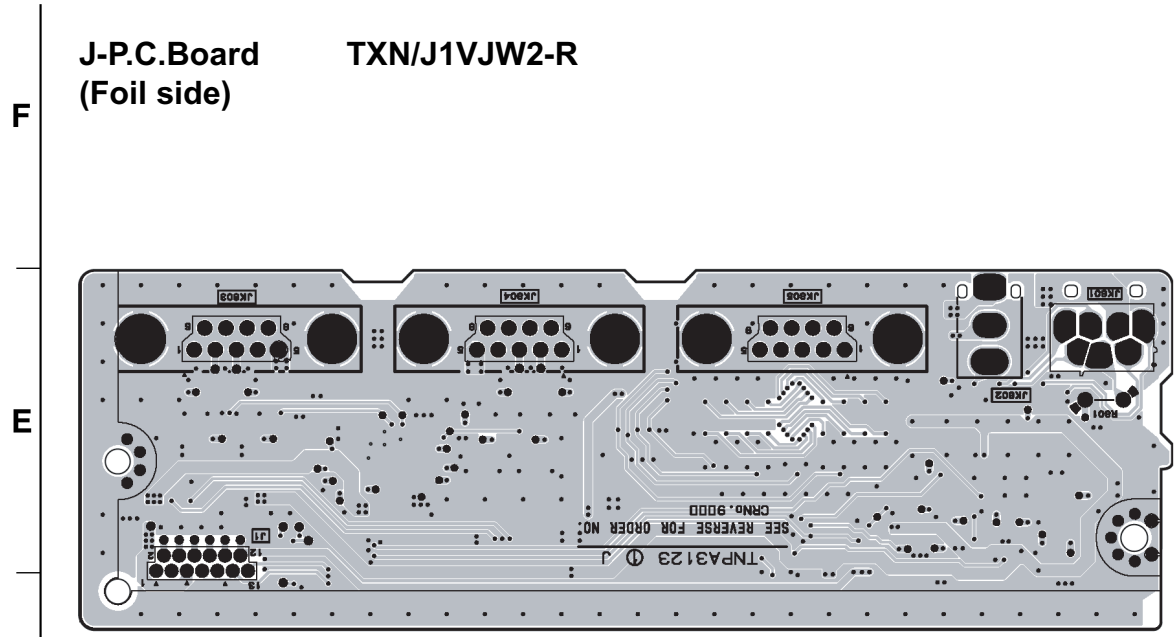
[A-P.C.Board TXN/A2VKC6  
(Component Side)]



A-P.C.Board (Component Side)					
IC					
IC2001	C-6	IC3005	C-5	IC3043	A-3
IC2004	B-6	IC3006	C-6	IC3045	A-5
IC2008	C-6	IC3008	D-1	IC3046	B-5
IC2012	C-7	IC3010	B-1	IC3049	B-3
IC2505	B-2	IC3011	B-2	IC3601	D-2
IC2508	A-4	IC3012	C-2	IC3608	A-2
IC2511	B-2	IC3014	D-4	IC3613	A-7
IC2518	A-7	IC3015	D-5	IC3618	C-7
IC2519	A-7	IC3017	D-4	IC3623	A-4
IC2520	A-7	IC3018	C-4	IC3633	C-2
IC2524	B-6	IC3021	C-6	IC3641	B-1
IC3003	D-7	IC3038	B-3		
TRANSISTOR					
Q2503	A-7	Q3009	D-5	Q3610	D-1
Q2505	A-7	Q3010	D-4	Q3615	D-1
Q2508	A-7	Q3011	C-4	Q3618	A-2
Q2510	C-6	Q3012	D-5	Q3619	A-1
Q2511	C-6	Q3013	C-5	Q3620	A-2
Q3001	C-1	Q3014	D-5	Q3621	A-1
Q3002	D-6	Q3015	D-5	Q3623	B-7
Q3004	D-6	Q3016	D-3	Q3624	A-6
Q3005	D-2	Q3017	D-6	Q3629	A-4
Q3006	D-2	Q3605	A-2		
Q3008	C-5	Q3606	A-1		

ADDRESS INFORMATION

16.3. J-P.C.Board

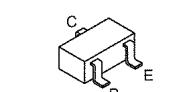
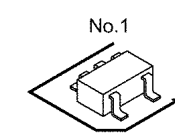
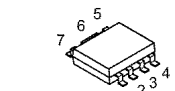
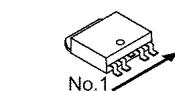
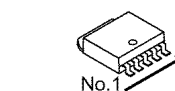
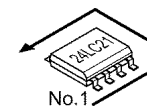
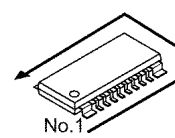
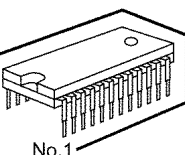
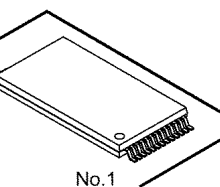
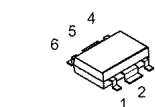
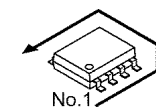
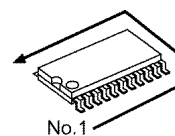
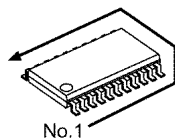
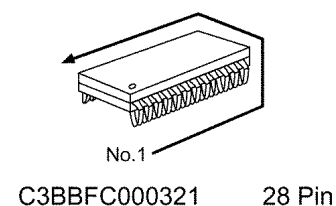
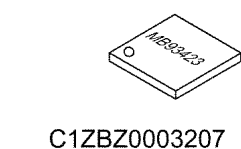
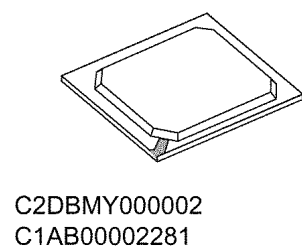
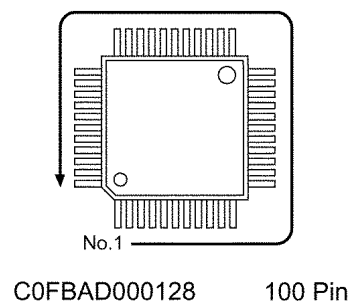
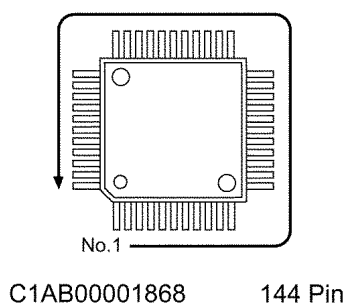
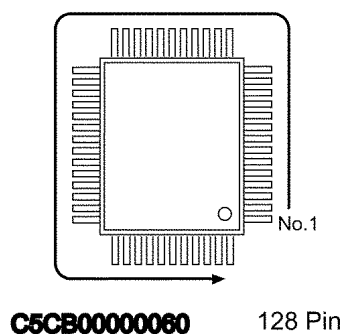


J-P.C.Board (Component Side)				
IC				
IC9801	B-1	IC9804	B-4	
IC9802	B-3	IC9805	B-3	
IC9803	B-3	IC9806	B-4	
TRANSISTOR				
Q9801	B-3	Q9804	B-2	
Q9802	B-3	Q9805	B-4	
Q9803	B-2			
ADDRESS INFORMATION				



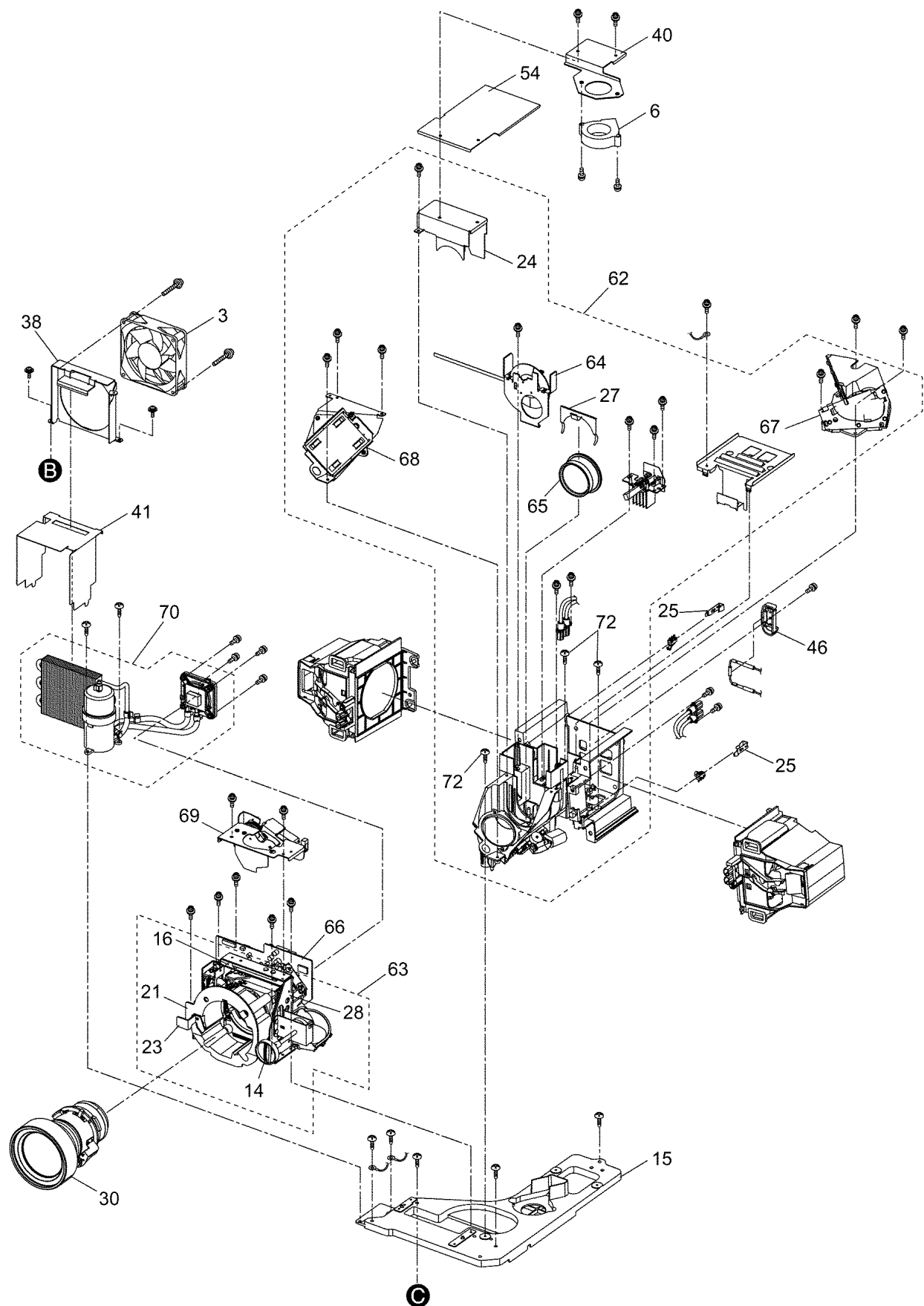


# 17 Terminal guide of ICs and transistors

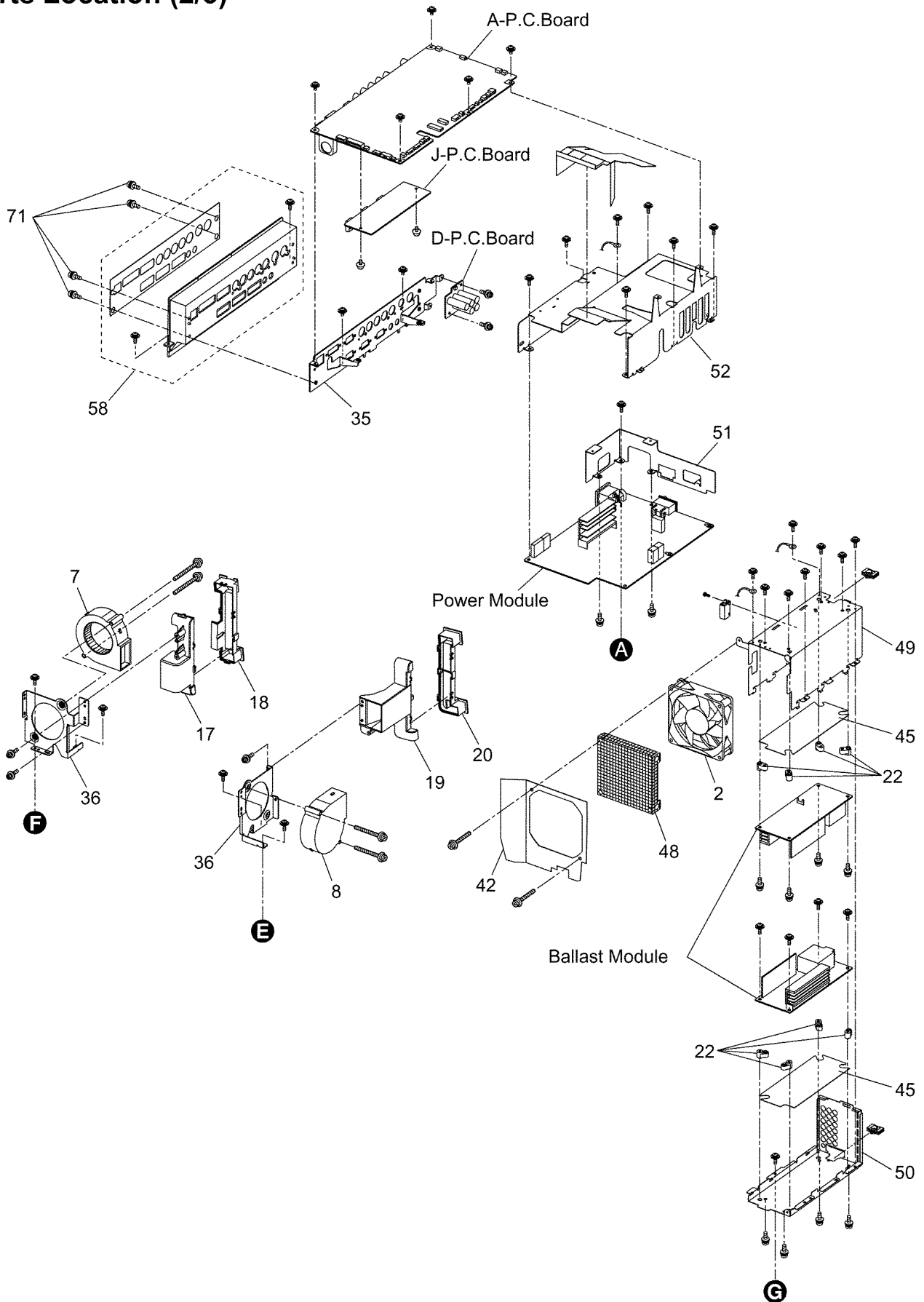


# 18 Exploded Views

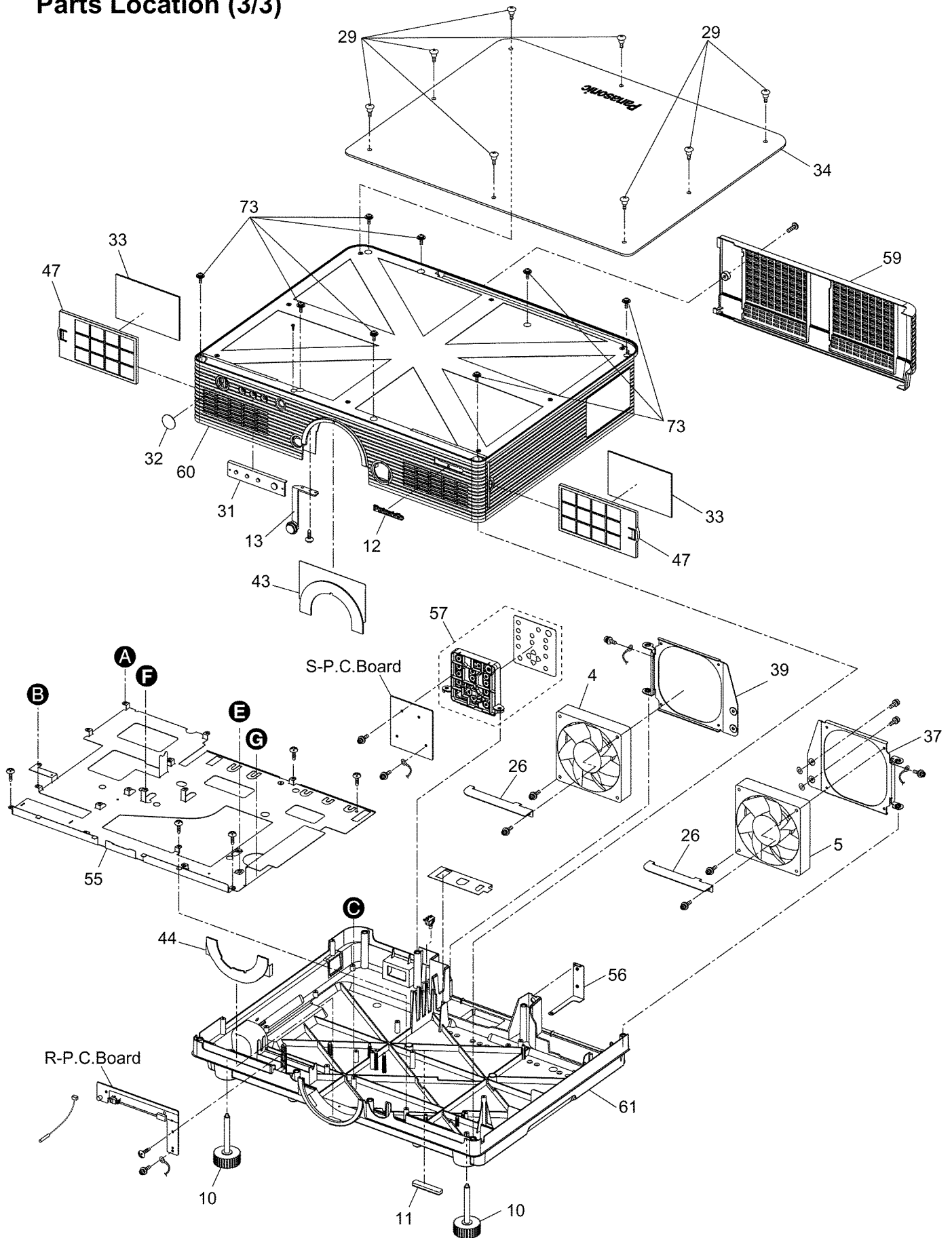
## Parts Location (1/3)



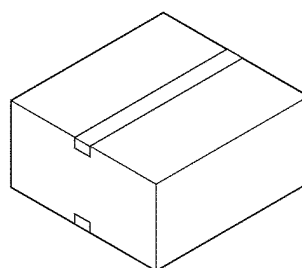
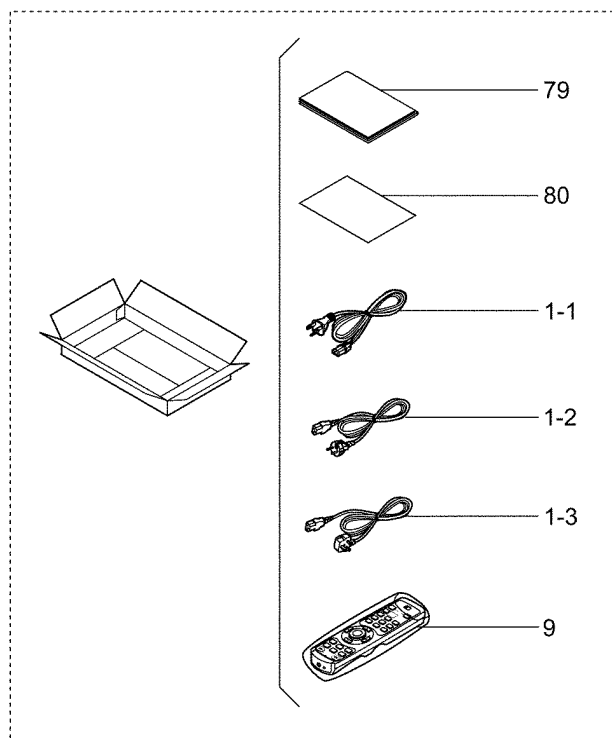
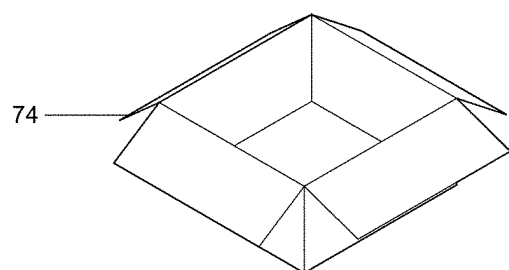
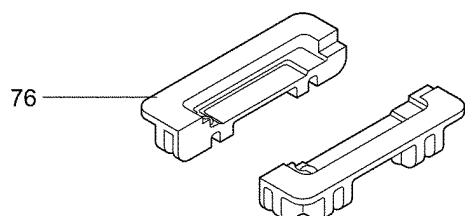
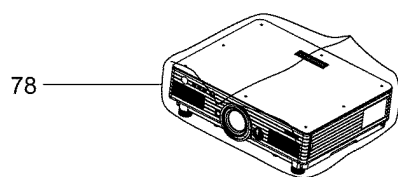
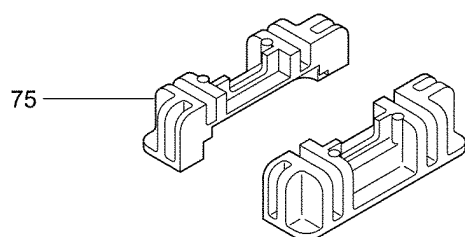
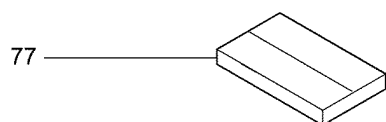
## Parts Location (2/3)



## Parts Location (3/3)




## Packing Parts



# 19 Replacement Parts List

## Important Safety Notice

Components identified by the International symbol  have special characteristics important for safety.  
When replacing any of these components, use only the manufacturer's specified parts.

### Abbreviation of part name and description

#### 1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Carbon	F : $\pm 1\%$
F : Fuse	G : $\pm 2\%$
M : Metal Oxide	J : $\pm 5\%$
Metal Film	K : $\pm 10\%$
S : Solid	M : $\pm 20\%$
W : Wire Wound	

#### 2. Capacitor

Example:















ECKF1H103ZF C 0.01PF, Z, 50V

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic	C : $\pm 0.25$ pF
E : Electrolytic	D : $\pm 0.5$ pF
P : Polyester	F : $\pm 1$ pF
PP : Polypropylene	J : $\pm 5\%$
S : Polystyrol	K : $\pm 10\%$
T : Tantalum	L : $\pm 15\%$
	M : $\pm 20\%$
	P : $+100\%$ , $-0\%$
	Z : $+80\%$ , $-20\%$

### Notes:

Printed circuit board assembly with mark (RTL) is no longer available after production discontinuation of the complete set.

Ref. No.	Part No.	Part Name & Description	Remarks
[MECHANICAL PARTS]			
	D4CDY4930001	TEMP SENSOR	
	D4CDY4930002	TEMP SENSOR	
	D4CDY4930003	TEMP THERMISTOR	
	J0KG00000013	CLAMP CORE	
	K0AACE000023	AC SWITCH	
	K0KACF000068	LIMIT SWITCH	
	K2AH3G000009	AC INLET	
1-1	K2CG3FZ00008	POWER CORD	 D5600U/UL, DW5000U/UL
1-2	K2CM3FZ00003	POWER CORD (EUROPE)	 D5600E/EL, DW5000E/EL
1-3	K2CT3FZ00003	POWER CORD (UK)	 D5600E/EL, DW5000E/EL
	K3GE1PB00003	FUSE HOLDER	D5600U/UL, DW5000U/UL
	K3GE1BB00011	FUSE HOLDER	D5600E/EL, DW5000E/EL
	K5D123AQA001	FUSE	 D5600U/UL, DW5000U/UL
	K5D632BNA005	FUSE	 D5600E/EL, DW5000E/EL
	L2EH00000001	QUANTITY OF WIND SENSOR	
2	L6FAMEGH0013	FAN	
3	L6FAMEGH0014	FAN	
4	L6FAPEHH0004	EXHAUST FAN (L)	
5	L6FAPEHH0005	EXHAUST FAN (R)	
6	L6FCJC9H0008	FAN	
7	L6FCLECH0003	SIROCCO FAN	
8	L6FCLECH0004	SIROCCO FAN	
9	N2QAYA000005	REMOTE CONTROLLER	
10	TBLB3202	ADJUSTER	
11	TBLG3042	RUBBER LEG (REAR)	
12	TBMA159	PANASONIC BADGE	

Ref. No.	Part No.	Part Name & Description	Remarks
	TBMG326	MODEL NAME PLATE	D5600U
	TBMG327	MODEL NAME PLATE	D5600E
	TBMG329	MODEL NAME PLATE	D5600UL
	TBMG330	MODEL NAME PLATE	D5600EL
	TBMG332	MODEL NAME PLATE	DW5000U
	TBMG333	MODEL NAME PLATE	DW5000E
	TBMG335	MODEL NAME PLATE	DW5000UL
	TBMG336	MODEL NAME PLATE	DW5000EL
	TBMG341	MODEL NO. LABEL	D5600U
	TBMG342	MODEL NO. LABEL	D5600E
	TBMG344	MODEL NO. LABEL	D5600UL
	TBMG345	MODEL NO. LABEL	D5600EL
	TBMG347	MODEL NO. LABEL	DW5000U
	TBMG348	MODEL NO. LABEL	DW5000E
	TBMG350	MODEL NO. LABEL	DW5000UL
	TBMG351	MODEL NO. LABEL	DW5000EL
13	TBXA44501A	LENS RELEASE BUTTON	
14	TBXA44601	HORIZONTAL ADJUST KNOB	
15	TEDC5087	OPTICAL BASE	
16	TEEC0033-1	LENS MECA UNIT	
17	TEEC5157	INHALATION DUCT 1 (R)	
18	TEEC5158	INHALATION DUCT 2 (R)	
19	TEEC5159	INHALATION DUCT 1 (L)	
20	TEEC5160	INHALATION DUCT 2 (L)	
21	TEEC5168-1	LENS GUIDE	
22	TEEC5231	SPACER	
23	TEKX030	LENS LEVER	
24	TENC5272-1	CW COVER	
	TENC5285	GUIDE PLATE	
25	TENC5287	SW SUPPORT METAL	
	TENC5303	MOUNTER METAL	
26	TENC5366	EXHAUST FAN GIRD	
27	TESA235	LENS HOLDER SPRING	
	TESA252	MOUNT SPRING	
	TESA266-1	SW SPRING	
28	TGAX034-1	ELECTRIC SHIFT MOUNT	
	THEC084N	D-SUB SCREW	
29	THEC092N	SCREW	D5600U/UL, D5600E/EL
	THEC0939	SCREW	DW5000U/UL, DW5000E/EL

Ref. No.	Part No.	Part Name & Description	Remarks
30	TKGF0109-2	LENS	D5600U/E, DW5000U/E
	TKGX5017	GLASS WASHER	
31	TKKC5156	LENS GUIDE PLATE	
32	TKKC5194	REMOTE CONTROL RECEIVER	
	TKKL5244-1	LENS CAP	
33	TKNE062-1	FILTER	
34	TKRA40201C	TOP PLATE	D5600U/UL, D5600E/EL
	TKRA40202	TOP PLATE	DW5000U/UL, DW5000E/EL
35	TKZF5036	TERMINAL METAL	
36	TKZJ5055-1	INSTALL METAL (FAN)	
37	TKZJ5056-2	EXHAUST FAN METAL (L)	
38	TKZJ5057-1	POWER FAN METAL	
39	TKZJ5058-1	EXHAUST FAN METAL (R)	
40	TKZJ5065	CW FAN METAL	
	TMKG481	PROTECTION DUST SHEET (FAN)	
	TMKG481	PROTECTION DUST SHEET (FAN)	
	TMKG482	PROTECTION DUST SHEET (DUC)	
	TMKG482	PROTECTION DUST SHEET (DUC)	
	TMKG522	SPONGE 3	
	TMKG724	LENS SPACER	D5600U/E, DW5000U/E
	TMKK217-1	RUBBER WASHER	
	TMKK219	RUBBER WASHER	
	TMKK271	RUBBER SPACER	
	TMKX100	WASHER	
41	TMKX721-1	SHEET	
42	TMKX778-3	SHEET (POWER)	
	TMKX953-1	INSULATION SHEET	
	TMKY006	SHELTER SHEET (FAN)	
43	TMKY069	LENS SHEET	
44	TMKY070	LENS SHEET	
	TMKY071	LENS SHEET	D5600UL/EL, DW5000UL/EL
	TMKY072	SHADING SHEET	
	TMKY073	SHEET 1	
	TMKY074	EXHAUST FAN GUIDE	
	TMKY075	SHEET 2	
	TMKY076-1	SHEET	
	TMKY092	SHELTER SHEET	
45	TMKY093	INSULATION SHEET	
	TMKY095	FAN WIRE DISPOSAL SHEET L	
	TMKY096	FAN WIRE DISPOSAL SHEET R	
	TMKY131	INSULATION SHEET	
	TMM16473-1	CLAMPER	
	TMM7468-1	CLAMPER	
	TMME159	SPACER	
	TMME159	SPACER	
	TMME211	EDGE HOLDER	
	TMME245	SPACER	
	TMME274	CLAMPER	
	TMME284	CLAMP	
46	TMXC017-1	TEMP FUSE METAL	
47	TMZX5046-3	FILTER INSTALL METAL	
74	TPCC01002	CARTON	D5600U
	TPCC01003	CARTON	D5600E
	TXFPC99QDSZ	CARTON	D5600UL
	TXFPC99QDTZ	CARTON	D5600EL
	TPCC01006	CARTON	DW5000U
	TPCC01007	CARTON	DW5000E
	TXFPC99QDQZ	CARTON	DW5000UL
	TXFPC99QDRZ	CARTON	DW5000EL
75	TPDA1025	CUSHION 1	
76	TPDA1026	CUSHION 2	
77	TPDF1311	ACCESSARY PACKING CASE	
78	TPEH187-1	SET COVER	

Ref. No.	Part No.	Part Name & Description	Remarks
	TQB817002-1	SAFETY SHEET	D5600U/UL, DW5000U/UL
80	TQBH7017	SHEET (PASSWORD)	
79	TQBJ0200	INSTRUCTION BOOK	△ D5600U/UL, DW5000U/UL
	TQBJ0201	INSTRUCTION BOOK	△ D5600E/EL, DW5000E/EL
	TQD1712010	SHEET	
	TQDH19009	SHEET	
	TQDH19011	SHEET	D5600U/E, DW5000U/E
	TQDJ18027-1	GUARANTEE CARD	D5600U/UL, DW5000U/UL
	TSXL504	FLEX CABLE (A2-R1)	△
	TSXL505	FLEX CABLE (A1-S1)	△
	TSXL532	FLEX CABLE (A3-J1)	△
	TSXL563	FLEX CABLE (A41-FM1)	△
	TUCB5037	ALUMINUM SHEET 1	
	TUCB5038	ALUMINUM SHEET 2	
	TUCB5043	ALUMINUM SHEET 3	
	TUCB5058	ALUMINUM SHEET	
	TUCB5067	ALUMINUM SHEET	
	TUCB5068	ALUMINUM SHEET	
	TUCB5069	ALUMINUM SHEET	
	TUCB5070	ALUMINUM SHEET	
	TUCB5071	ALUMINUM SHEET	
	TUCB5072	ALUMINUM SHEET	
	TUCB5073	ALUMINUM SHEET (CW)	
48	TUCC5802-2	SHIELD PLATE	
49	TUCC5993-3	SHIELD CASE 1	
50	TUCC5994-3	SHIELD CASE 2	
51	TUCC5995-1	POWER SHIELD METAL 1	
52	TUCC5996-1	POWER SHIELD METAL 2	
54	TUCJ5603	CW COOLING METAL	
55	TUCX5176-2	BASE METAL	
56	TUCX5220	FAN EARTH METAL	
	TUXK039	FAN SPACER 1	
	TUXK040	FAN SPACER 2	
57	TXFBX01VJW2	CONTROL BUTTON	
58	TXFPA01VJW2	TERMINAL COVER ASSY	
59	TXFKF99QDAZ	LAMP COVER ASSY	
60	TXFKF99QDAZ	UPPER COVER	
61	TXFKF98QDAZ	BOTTOM COVER	D5600U
	TXFKF98QDBZ	BOTTOM COVER	D5600E
	TXFKF98QDSZ	BOTTOM COVER	D5600UL
	TXFKF98QDTZ	BOTTOM COVER	D5600EL
	TXFKF98QCYZ	BOTTOM COVER	DW5000U
	TXFKF98QCZZ	BOTTOM COVER	DW5000E
	TXFKF98QDQZ	BOTTOM COVER	DW5000UL
	TXFKF98QDRZ	BOTTOM COVER	DW5000EL
	TXFSE01VJW2	GROUND LEAD (A7 - LAMP)	
	TXFSE01VKC6	LEAD WIRE WITH MOTOR	
	TXFSE02VJW2	GROUND LEAD (A8 - LAMP)	
	TXFSE02VKC6	GROUND LEAD	
	TXFSE03VJW2	FAIL-SAFE SWITCH	
	TXFSE04VJW2	LEAD WIRE (A61) WITH MOTOR	
	TXJ/E1VJW2B	INLET EARTH	△
	TXJ/E2VJW2C	EARTH WIRE (BALLAST-FAN L)	△
	TXJ/E3VJW2B	LEAD WIRE	△
	TXJ/E4VJW2B	LEAD WIRE	△
	TXJ/E5VJW2B	LEAD WIRE	△
	TXJ/E6VJW2B	LEAD WIRE	△
	TXJ/E7VJW2B	LEAD WIRE	△
	TXJ/E8VJW2B	LEAD WIRE	△
	TXJ/L3VJW2	LEAD WIRE	△
	TXJ/P1VJW2B	LEAD WIRE	△
	TXJ/P2VJW2	LEAD WIRE (P2/P3 - CN1)	△
	TXJ/P7VJW2	LEAD WIRE (P7 - FM2)	△
	TXJA12VKC6	WIND SENSOR CABLE	
	TXJA20VJW2	LEAD WIRE (A20 - D1)	△
	TXJA40VJW2	LEAD WIRE (A40 - FM3)	△
	TXJA42VJW2	LEAD WIRE (A42 - P5)	△

Ref. No.	Part No.	Part Name & Description	Remarks
	TXJA43VJW2	LEAD WIRE (A43 - P6)	△
	TXJA5VJW2B	LEAD WIRE	△
	TXJA6VJW2B	LEAD WIRE	△
62	TXZEC01VKC6	ANALYSIS BLOCK	D5600U/UL, D5600E/EL
	TXZEC01VKC5	ANALYSIS BLOCK	DW5000U/UL, DW5000E/EL
63	TXZEC02VKC6	LENS MOUNT	
64	TXZKG02VKC6	COLOR WHEEL	
65	TXZKG03VJW2	RELAY LENS HOLDER	
66	TXZKG03VKC6	DMD BLOCK	D5600U/UL, D5600E/EL
	TXZKG03VKC5	DMD BLOCK	DW5000U/UL, DW5000E/EL
	TXZKG04VJW2	LENS HOLDER	
67	TXZKJ01VJW2	OPTICAL MIRROR ASSY	
68	TXZKJ02VJW2	REFLECT MIRROR ASSY	
69	TXZTE01VKC6	MECA SHUTTER	
70	UDLS015AVA	COOLING UNIT ASSY	
	XQN2+C2FJK	SCREW	
	XQN2+C3FJK	SCREW	
	XSB2+8FJ	SCREW	
	XSB3+10FN	SCREW	
71	XSB3+8FN	SCREW	
	XSB4+10FC	SCREW	
	XSN3+12FJ	SCREW	
	XSN3+8FJ	SCREW	
	XTB4+10JFJ	SCREW	
	XTBT969FJK	SCREW	
	XTN2+4GFJ	SCREW	
	XTN3+4FFJ	SCREW	
	XTN3+6FFJ	SCREW	
	XTW3+6PFJ	SCREW	
	XTW3+8PFJ	SCREW	
	XUC3FJ	WASHER	
	XWE2FJ	WASHER	
	XWGV3D54G	WASHER	
	XYC3+JJ12FJ	SCREW	
	XYN2+J18FJ	SCREW	
	XYN2+J6FJ	SCREW	
	XYN2+J6FN	SCREW	
	XYN3+F10FJ	SCREW	
	XYN3+F10FN	SCREW	
	XYN3+F20FJ	SCREW	
	XYN3+F20FJK	SCREW	
	XYN3+F30FJ	SCREW	
	XYN3+F35FJ	SCREW	
	XYN3+F35FJ	SCREW	
	XYN3+F6FJ	SCREW	
	XYN3+F6FN	SCREW	
72	XYN3+F8FJ	SCREW	
	XYN3+J35FJ	SCREW	
	XYN3+J8FJ	SCREW	
	XYN4+E8FJ	SCREW	
73	XYN4+J10FJ	SCREW	
	XYN4+J30FJ	SCREW	
	XZBT6506	POLY BAG	
[INTEGRATED CIRCUIT]			
IC2001	C0JBAB000290	I.C	
IC2002	C5CB00000060	I.C	
IC2004	C3ABQJ000023	I.C	
IC2006	TVRN899	I.C	
IC2008	C0DBFFD00003	I.C	
IC2009	C2DBMY000002	I.C	
IC2011	C0CBCBG00013	I.C	
IC2501	C0CBCBG00013	I.C	
IC2502	C0JBAR000415	I.C	
IC2503	C0JBAR000415	I.C	
IC2505	C0JBAZ001467	I.C	
IC2506	C0EBB0000145	I.C	
IC2507	C2DBYH000024	I.C	
IC2508	C3EBLC000034	I.C	

Ref. No.	Part No.	Part Name & Description	Remarks
IC2509	TVRN898	I.C	
IC2511	C3BBFC000321	I.C	
IC2518	C0JBAA000377	I.C	
IC2519	C0JBAA000377	I.C	
IC2520	C0JBAA000377	I.C	
IC2523	C0JBAA000377	I.C	
IC2524	C1DB00001208	I.C	
IC3003	C0FBAD000128	I.C	
IC3005	C0DBZHE00019	I.C	
IC3006	C3EBEC000054	I.C	
IC3007	C0JBAS000206	I.C	
IC3008	C1AB00001466	I.C	
IC3010	C0CBCAD00012	I.C	
IC3011	C0CBCAD00012	I.C	
IC3012	C1AB00001868	I.C	
IC3014	C0JBAR000370	I.C	
IC3015	C1AB00002017	I.C	
IC3017	C1AA00000705	I.C	
IC3018	C0JBAA000359	I.C	
IC3019	C0CBCBG00013	I.C	
IC3020	C0CBCAD00015	I.C	
IC3021	C0CBCBD00008	I.C	
IC3025	C3EBDC000067	I.C	
IC3034	C1AB00002041	I.C	
IC3035	C3ABPJ000071	I.C	
IC3036	C0CBCAG00015	I.C	
IC3038	C0JBAZ002560	I.C	
IC3040	C0DBZFG00055	I.C	
IC3042	C1ZBZ0003207	I.C	
IC3043	C0JBAZ001437	I.C	
IC3045	C0ZBZ0001199	I.C	
IC3046	C0ZBZ0001200	I.C	
IC3049	C0ZBZ0001421	I.C	
IC3051	C0CBCAD00012	I.C	
IC3601	C0JBAB000624	I.C	
IC3608	C0FBBD000183	I.C	
IC3611	C0CBCYG00004	I.C	
IC3612	C0CBCYG00004	I.C	
IC3613	C0CBCYG00004	I.C	
IC3614	C0CBCYG00004	I.C	
IC3615	C0CBCYG00004	I.C	
IC3618	C0CBCYG00004	I.C	
IC3620	C0CBCYG00004	I.C	
IC3621	C0CBCYG00004	I.C	
IC3623	C0CBCYG00004	I.C	
IC3625	C0CBCYG00004	I.C	
IC3627	C0GBG0000053	I.C	
IC3628	C0GBA0000035	I.C	
IC3629	C1AB00002281	I.C	
IC3631	C3ABPJ000071	I.C	
IC3633	C0CBCAC00096	I.C	
IC3634	C0DBZFF00003	I.C	
IC3635	C0GBG0000053	I.C	
IC3636	C0GBG0000053	I.C	
IC3641	C0CBCAG00016	I.C	
IC9602	C0BBBA000076	I.C	
IC9801	C1CB00001750	I.C	
IC9802	C0JBAB000621	I.C	
IC9803	C0JBAZ000801	I.C	
IC9804	C0JBAB000621	I.C	
IC9805	C0JBAB000621	I.C	
IC9806	C0JBAB000621	I.C	
[TRANSISTORS]			
Q2501	2SD1819A	TRANSISTOR	
Q2503	2SD1819A	TRANSISTOR	
Q2505	2SD1819A	TRANSISTOR	
Q2507	2SD1819A	TRANSISTOR	
Q2508	2SD1819A	TRANSISTOR	
Q2510	B1CBHD000001	TRANSISTOR	
Q2511	B1CBHD000001	TRANSISTOR	
Q3000	2SD10300TL	TRANSISTOR	



Ref. No.	Part No.	Part Name & Description	Remarks
Q3001	2SD10300TL	TRANSISTOR	
Q3002	B1CBHD000001	TRANSISTOR	
Q3003	2SD1819A	TRANSISTOR	
Q3004	B1CBHD000001	TRANSISTOR	
Q3005	2SD1819A	TRANSISTOR	
Q3006	2SB1218A	TRANSISTOR	
Q3007	2SB1218A	TRANSISTOR	
Q3008	2SD1819A	TRANSISTOR	
Q3009	2SB1218A	TRANSISTOR	
Q3010	2SD1819A	TRANSISTOR	
Q3011	2SB1218A	TRANSISTOR	
Q3012	2SD1819A	TRANSISTOR	
Q3013	2SB1218A	TRANSISTOR	
Q3014	2SD1819A	TRANSISTOR	
Q3015	2SB1218A	TRANSISTOR	
Q3016	2SD1819A	TRANSISTOR	
Q3017	UNR221100L	TRANSISTOR	
Q3018	UNR221100L	TRANSISTOR	
Q3019	UNR221100L	TRANSISTOR	
Q3021	B1CBHD000001	TRANSISTOR	
Q3022	B1CBHD000001	TRANSISTOR	
Q3023	UNR221100L	TRANSISTOR	
Q3031	UNR221100L	TRANSISTOR	
Q3032	2SD1819A	TRANSISTOR	
Q3033	2SB1218A	TRANSISTOR	
Q3605	B1CBHD000001	TRANSISTOR	
Q3606	B1CBHD000001	TRANSISTOR	
Q3607	UNR221100L	TRANSISTOR	
Q3608	B1CHQD000001	TRANSISTOR	
Q3609	UNR221100L	TRANSISTOR	
Q3610	2SK060100L	TRANSISTOR	
Q3611	2SD601A-R	TRANSISTOR	
Q3614	2SD601A-R	TRANSISTOR	
Q3615	B1CHQD000001	TRANSISTOR	
Q3618	2SD601A-R	TRANSISTOR	
Q3619	2SD601A-R	TRANSISTOR	
Q3620	2SD601A-R	TRANSISTOR	
Q3621	2SD601A-R	TRANSISTOR	
Q3623	2SD601A-R	TRANSISTOR	
Q3624	2SD601A-R	TRANSISTOR	
Q3627	2SB1218A	TRANSISTOR	
Q3628	2SB1218A	TRANSISTOR	
Q3629	2SD601A-R	TRANSISTOR	
Q9801	2SD1819A	TRANSISTOR	
Q9802	2SB1218A	TRANSISTOR	
Q9803	2SD1819A	TRANSISTOR	
Q9804	2SB0710AWL	TRANSISTOR	
Q9805	2SB1218A	TRANSISTOR	
[DIODES]			
D2001	MA157A	DIODE	
D2002	MA157A	DIODE	
D2003	MA157A	DIODE	
D2004	MA157A	DIODE	
D2504	MA157A	DIODE	
D2505	MA157A	DIODE	
D2508	MA152WK	DIODE	
D2509	MA152WK	DIODE	
D3000	MA8056M	DIODE	
D3001	MA8056M	DIODE	
D3002	MA8056M	DIODE	
D3003	MA157A	DIODE	
D3004	MA157A	DIODE	
D3005	MA157A	DIODE	
D3009	MA157A	DIODE	
D3013	EZJZOV80008B	VARISTOR	
D3014	EZJZOV80008B	VARISTOR	
D3015	MA157A	DIODE	
D3016	MA157A	DIODE	
D3017	EZJZOV80008B	VARISTOR	
D3018	EZJZOV80008B	VARISTOR	
D3019	MA157A	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D3020	MA157A	DIODE	
D3021	MA157A	DIODE	
D3022	MA157A	DIODE	
D3023	MA157A	DIODE	
D3024	MA157A	DIODE	
D3025	EZJZOV171AA	VARISTOR	
D3026	MA8056M	DIODE	
D3027	MA8056M	DIODE	
D3036	B0JCAE000001	DIODE	
D3037	B0JCGD000002	DIODE	
D3040	EZJZOV80008B	VARISTOR	
D3041	EZJZOV80008B	VARISTOR	
D3042	EZJZOV80008B	VARISTOR	
D3043	EZJZOV80008B	VARISTOR	
D3044	EZJZOV80008B	VARISTOR	
D3045	EZJZOV80008B	VARISTOR	
D3046	EZJZOV80008B	VARISTOR	
D3047	EZJZOV80008B	VARISTOR	
D3048	MA8056M	DIODE	
D3611	B0JCPD000026	DIODE	
D3612	B0JCPD000026	DIODE	
D3616	B0JCPD000026	DIODE	
D3621	B0JCPD000026	DIODE	
D9701	B0HCOMM00013	DIODE	
D9702	MAZY12000L	DIODE	
D9802	MA157A	DIODE	
D9813	MA157A	DIODE	
D9815	MA8056M	DIODE	
D9816	MA8056M	DIODE	
D9817	MA8056M	DIODE	
D9818	MA8056M	DIODE	
D9819	MA8056M	DIODE	
D9820	MA8056M	DIODE	
D9821	MA8056M	DIODE	
D9822	MA8056M	DIODE	
D9823	D4ED1270A006	VARISTOR	
D9824	D4ED1270A006	VARISTOR	
D9825	D4ED1270A006	VARISTOR	
D9826	D4ED1270A006	VARISTOR	
D9827	D4ED1120A002	VARISTOR	
D9828	D4ED1120A002	VARISTOR	
D9829	D4ED1120A002	VARISTOR	
D9830	D4ED1120A002	VARISTOR	
D9901	B3AGB0000033	DIODE	
D9902	LNJ208R8ARA	LED	
D9903	LNJ208R8ARA	LED	
D9904	LNJ208R8ARA	LED	
[COILS]			
L2001	J0JJC0000022	EMI FILTER	
L2003	J0JHC0000078	FILTER	
L2004	J0JJC0000022	EMI FILTER	
L2005	J0JJC0000022	EMI FILTER	
L2006	J0JJC0000022	EMI FILTER	
L2502	ELJFA6R8JFB	COIL	
L2503	ELJFA470JFB	COIL	
L2504	ELJFA6R8JFB	COIL	
L2505	ELJFA6R8JFB	COIL	
L2544	J0JJC0000022	EMI FILTER	
L2545	ELJFA6R8JFB	COIL	
L3003	ELJFA100JFB	PEAKING COIL	
L3004	ELJFA100JFB	PEAKING COIL	
L3005	J0JJC0000022	EMI FILTER	
L3006	J0JJC0000022	EMI FILTER	
L3008	J0JJC0000022	EMI FILTER	
L3009	G1C100K00031	INDUCTOR	
L3010	J0JJC0000022	EMI FILTER	
L3011	J0JJC0000022	EMI FILTER	
L3012	J0JJC0000022	EMI FILTER	
L3013	J0JJC0000022	EMI FILTER	
L3017	J0JHC0000078	FILTER	
L3018	J0JJC0000022	EMI FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
L3022	J0JJC0000022	EMI FILTER	
L3023	J0JJC0000022	EMI FILTER	
L3025	J0JJC0000022	EMI FILTER	
L3026	J0JJC0000022	EMI FILTER	
L3030	J0JJC0000022	EMI FILTER	
L3031	J0JJC0000022	EMI FILTER	
L3036	J0JCC0000238	FILTER	
L3043	J0JJC0000022	EMI FILTER	
L3045	J0JJC0000022	EMI FILTER	
L3046	J0JJC0000022	EMI FILTER	
L3047	J0JJC0000022	EMI FILTER	
L3048	J0JJC0000022	EMI FILTER	
L3049	J0JJC0000022	EMI FILTER	
L3051	J0MAB0000176	COIL	
L3052	J0MAB0000176	COIL	
L3053	J0MAB0000176	COIL	
L3054	J0MAB0000176	COIL	
L3058	ELJFA470JFB	COIL	
L3059	J0JHC0000078	FILTER	
L3066	J0JHC0000078	FILTER	
L3067	J0JCC0000168	FILTER	
L3068	J0JHC0000078	FILTER	
L3069	J0JCC0000168	FILTER	
L3070	J0JHC0000078	FILTER	
L3071	J0JCC0000168	FILTER	
L3072	J0JHC0000078	FILTER	
L3073	J0JCC0000168	FILTER	
L3074	J0JHC0000078	FILTER	
L3075	J0JCC0000168	FILTER	
L3076	J0JHC0000078	FILTER	
L3077	J0JHC0000078	FILTER	
L3078	J0JHC0000078	FILTER	
L3079	J0JCC0000168	FILTER	
L3080	J0JHC0000078	FILTER	
L3081	J0JCC0000168	FILTER	
L3082	J0JHC0000078	FILTER	
L3083	J0JCC0000168	FILTER	
L3084	J0JCC0000238	FILTER	
L3085	J0JCC0000168	FILTER	
L3501	J0JCC0000364	FILTER	
L3502	J0JCC0000364	FILTER	
L3503	J0JCC0000364	FILTER	
L3504	J0JCC0000364	FILTER	
L3505	J0JCC0000364	FILTER	
L3506	J0JCC0000364	FILTER	
L3507	J0JCC0000364	FILTER	
L3602	J0JJC0000022	EMI FILTER	
L3605	J0JJC0000022	EMI FILTER	
L3606	J0JJC0000022	EMI FILTER	
L3607	J0JJC0000022	EMI FILTER	
L3608	J0JJC0000022	EMI FILTER	
L3610	J0JJC0000022	EMI FILTER	
L3611	ELJFA100JFB	PEAKING COIL	
L3612	J0JJC0000022	EMI FILTER	
L3615	J0JJC0000022	EMI FILTER	
L3617	J0JJC0000022	EMI FILTER	
L3620	J0JJC0000022	EMI FILTER	
L3623	J0JCC0000168	FILTER	
L3624	J0JCC0000168	FILTER	
L3625	J0JJC0000022	EMI FILTER	
L3626	J0JJC0000022	EMI FILTER	
L3627	J0JJC0000022	EMI FILTER	
L3632	ELJFA470JFB	COIL	
L3633	ELJFA270JFB	COIL	
L3634	ELJFA270JFB	COIL	
L3635	J0JJC0000022	EMI FILTER	
L3636	J0JCC0000168	FILTER	
L9703	J0JJC0000022	EMI FILTER	
L9704	J0JJC0000022	EMI FILTER	
L9801	J0JCC0000364	FILTER	
L9802	J0JCC0000364	FILTER	
L9803	J0JCC0000364	FILTER	
L9804	J0JCC0000364	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
L9805	J0JCC0000364	FILTER	
L9806	J0JCC0000364	FILTER	
L9814	J0JCC0000168	FILTER	
L9820	J0JCC0000364	FILTER	
L9821	J0JCC0000364	FILTER	
L9822	J0JCC0000364	FILTER	
L9823	J0JCC0000364	FILTER	
L9824	J0JCC0000168	FILTER	
L9825	J0JCC0000168	FILTER	
L9826	J0JCC0000168	FILTER	
L9827	J0JCC0000364	FILTER	
L9828	J0JCC0000364	FILTER	
L9829	J0JCC0000364	FILTER	
L9830	J0JCC0000364	FILTER	
L9831	J0JCC0000364	FILTER	
L9832	J0JCC0000364	FILTER	
L9833	J0JCC0000364	FILTER	
L9834	J0JCC0000364	FILTER	
L9908	J0JCC0000168	FILTER	
L9909	J0JCC0000168	FILTER	
L9950	J0JCC0000168	FILTER	
FL2506	J0HABB000021	FILTER	
FL2507	J0HABB000021	FILTER	
FL2508	J0HABB000021	FILTER	
FL2509	J0HABB000021	FILTER	
FL2510	J0HABB000021	FILTER	
FL2511	J0HABB000021	FILTER	
FL2512	J0HABB000021	FILTER	
FL2513	J0HABB000021	FILTER	
FL2514	J0HABB000021	FILTER	
FL2515	J0HABB000021	FILTER	
FL2516	J0HABB000021	FILTER	
FL2517	J0HABB000021	FILTER	
FL2518	J0HABB000021	FILTER	
FL2519	J0HABB000021	FILTER	
FL2520	J0HABB000021	FILTER	
FL2521	J0HABB000021	FILTER	
FL2522	J0HABB000021	FILTER	
FL2523	J0HABB000021	FILTER	
FL2524	J0HABB000021	FILTER	
FL2525	J0HABB000021	FILTER	
FL2526	J0HABB000021	FILTER	
FL2527	J0HABB000021	FILTER	
FL2536	J0HABB000021	FILTER	
FL2537	J0HABB000021	FILTER	
FL2538	J0HABB000021	FILTER	
FL2539	J0HABB000021	FILTER	
FL2540	J0HABB000021	FILTER	
FL2541	J0HABB000021	FILTER	
FL2542	J0HABB000021	FILTER	
FL2543	J0HABB000021	FILTER	
FL2544	J0HABB000021	FILTER	
FL2545	J0HABB000021	FILTER	
FL3003	J0HABC000011	FILTER	
FL3004	J0HABC000011	FILTER	
FL3005	J0HABC000011	FILTER	
FL3006	J0HABC000011	FILTER	
FL3007	J0HABC000011	FILTER	
FL3008	J0HABC000011	FILTER	
FL3019	J0HABB000021	FILTER	
FL3020	J0HABB000021	FILTER	
FL3021	J0HABB000021	FILTER	
FL3022	J0HABB000021	FILTER	
FL3023	J0HABB000021	FILTER	
FL3024	J0HABB000021	FILTER	
FL3025	J0HABB000021	FILTER	
FL3026	J0HABB000021	FILTER	
FL3027	J0HABB000021	FILTER	
FL3030	J0HABB000015	FILTER	
FL3031	J0HABB000015	FILTER	
FL3033	J0HABB000015	FILTER	
FL9701	ELKE101FA	EMI FILTER	
FL9702	ELKE101FA	EMI FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
FL9801	J0HABB000021	FILTER	
FL9802	J0HABB000021	FILTER	
FL9803	J0HABB000021	FILTER	
FL9804	J0HABB000021	FILTER	
FL9805	J0HABB000021	FILTER	
FL9806	J0HABB000021	FILTER	
FL9807	J0HABB000021	FILTER	
FL9808	J0HABB000021	FILTER	
FL9809	J0HABB000021	FILTER	
FL9810	J0HABB000021	FILTER	
FL9901	J0HABB000021	FILTER	
FL9902	J0HABB000021	FILTER	
FL9903	J0HABB000021	FILTER	
FL9904	J0HABB000021	FILTER	
FL9905	J0HABB000021	FILTER	
FL9906	J0HABB000021	FILTER	
FL9907	J0HABB000021	FILTER	
FL9950	J0HABB000021	FILTER	
FL9951	J0HABB000021	FILTER	
FL9952	J0HABB000021	FILTER	
FL9953	J0HABB000021	FILTER	
FL9954	J0HABB000021	FILTER	
		[RESISTORS]	
R2001	ERJ6GEY0R00	RESISTOR	
R2005	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R2006	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R2011	ERJ6GEY0R00	RESISTOR	
R2015	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2019	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2024	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2025	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2027	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2028	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2029	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2030	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2032	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2033	D1HG2208A002	RESISTOR	
R2034	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2037	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2038	ERJ6ENF2002	RESISTOR	
R2039	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2040	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2041	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2042	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2043	ERJ6ENF2492	M24.9KOHM, 1/10W	
R2044	D1HG2208A002	RESISTOR	
R2046	ERJ3GEYJ105	RESISTOR	
R2048	ERJ6GEY0R00	RESISTOR	
R2051	ERJ6GEY0R00	RESISTOR	
R2052	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2053	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2055	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2056	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2057	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2059	ERJ6GEY0R00	RESISTOR	
R2060	D1HG2208A002	RESISTOR	
R2065	D1HG2208A002	RESISTOR	
R2067	D1HG2208A002	RESISTOR	
R2069	EXB28V220J	RESISTOR ARRAY	
R2070	D1HG2208A002	RESISTOR	
R2075	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2076	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2078	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2079	D1HG2208A002	RESISTOR	
R2081	D1HG2208A002	RESISTOR	
R2083	D1HG2208A002	RESISTOR	
R2089	EXB28V220J	RESISTOR ARRAY	
R2090	D1HG2208A002	RESISTOR	
R2092	D1HG2208A002	RESISTOR	
R2094	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2096	ERJ3GEYJ220	M 22 OHM, J, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2097	ERJ3GEYJ332	M 3.3KOHM, J, 1/16W	
R2098	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2099	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2100	D1HG2208A002	RESISTOR	
R2102	D1HG2208A002	RESISTOR	
R2104	EXB28V220J	RESISTOR ARRAY	
R2105	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2106	ERJ6GEY0R00	RESISTOR	
R2107	EXB28V220J	RESISTOR ARRAY	
R2109	ERJ6GEY0R00	RESISTOR	
R2119	ERJ6GEY0R00	RESISTOR	
R2120	ERJ6GEY0R00	RESISTOR	
R2124	ERJ6GEY0R00	RESISTOR	
R2125	ERJ6GEY0R00	RESISTOR	
R2126	ERJ6GEY0R00	RESISTOR	
R2127	ERJ6GEY0R00	RESISTOR	
R2128	ERJ6GEY0R00	RESISTOR	
R2129	ERJ6GEY0R00	RESISTOR	
R2130	ERJ6GEY0R00	RESISTOR	
R2132	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2137	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2139	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2140	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2141	ERJ3GEYJ220	RESISTOR	
R2142	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2143	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2147	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2150	ERJ6ENF2491	M2.49KOHM, 1/10W	
R2151	ERJ6GEY0R00	RESISTOR	
R2152	ERJ6GEY0R00	RESISTOR	
R2153	ERJ6GEY0R00	RESISTOR	
R2154	ERJ6GEY0R00	RESISTOR	
R2160	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2161	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2162	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2163	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2164	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2165	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2166	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2173	ERJ6GEY0R00	RESISTOR	
R2174	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R2177	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R2180	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2181	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2182	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2183	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2184	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2185	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R2187	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2188	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2191	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R2192	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2193	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2194	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R2195	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2197	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2198	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2201	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R2202	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2203	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R2204	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2205	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2235	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R2236	ERJ6GEY0R00	RESISTOR	
R2238	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2240	ERJ6GEY0R00	RESISTOR	
R2241	ERJ6GEY0R00	RESISTOR	
R2243	ERJ3GEYJ220	RESISTOR	
R2247	EXB28V220J	RESISTOR ARRAY	
R2505	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2506	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2507	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2508	ERJ3GEYJ220	M 22 OHM, J, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2509	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2510	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2511	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2512	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2513	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2514	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2515	EXB28V472J	RESISTOR ARRAY	
R2516	EXB28V472J	RESISTOR ARRAY	
R2520	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2521	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2523	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2528	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R2529	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2530	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2531	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2533	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2534	ERJ3GEYJ271	RESISTOR	
R2535	ERJ3GEYJ271	RESISTOR	
R2536	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2537	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2541	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2542	EXB28V220J	RESISTOR ARRAY	
R2545	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R2546	ERJ3GEYJ822	RESISTOR	
R2547	ERJ3GEYJ822	RESISTOR	
R2548	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2550	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R2551	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2555	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2556	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2557	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2558	EXB38V102J	RESISTOR ARRAY	
R2559	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2560	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2562	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R2564	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2565	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2566	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2567	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2568	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R2569	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R2570	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2571	EXB28V103J	RESISTOR ARRAY	
R2572	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2574	EXB28V103J	RESISTOR ARRAY	
R2575	EXB28V103J	RESISTOR ARRAY	
R2576	EXB28V103J	RESISTOR ARRAY	
R2578	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2579	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2580	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2581	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2582	EXB28V103J	RESISTOR ARRAY	
R2583	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2586	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2588	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2589	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2591	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2592	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2593	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2594	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2595	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2596	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2597	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2599	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2600	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2602	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2603	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2604	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2605	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2606	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2607	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2608	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2609	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2610	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2611	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2612	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2613	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2614	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2615	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2616	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2617	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2621	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2622	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2623	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2624	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2625	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2627	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2629	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2631	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2633	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2634	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2635	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2636	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2637	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2638	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2639	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2640	ERJ6GEYJ101	RESISTOR	
R2641	ERJ6GEYJ101	RESISTOR	
R2642	ERJ6GEYJ101	RESISTOR	
R2643	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2645	ERJ6GEYJ101	RESISTOR	
R2646	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2647	ERJ6GEYJ101	RESISTOR	
R2648	ERJ6GEYJ101	RESISTOR	
R2650	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2651	ERJ6GEYJ101	RESISTOR	
R2652	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2653	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2654	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2655	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2656	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2657	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2658	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2659	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2660	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2661	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2662	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2663	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2665	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2666	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2667	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2670	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2675	ERJ6GEYJ101	RESISTOR	
R2676	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2677	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2678	ERJ6GEYJ101	RESISTOR	
R2686	ERJ3GEYJ271	RESISTOR	
R2687	ERJ3GEYJ271	RESISTOR	
R2688	ERJ3GEYJ181	RESISTOR	
R2706	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2707	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2708	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2709	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R2710	ERJ3GEYJ561	M 560 OHM,J,1/16W	
R2711	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2712	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R2713	ERJ3GEYJ184	RESISTOR	
R2714	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2715	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2716	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2717	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2718	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2719	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2720	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2725	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2729	ERJ3GEYJ220	M 22 OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2730	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2731	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2732	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2733	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R2734	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2735	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2736	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2737	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2738	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2739	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R2740	ERJ3GEYJ181	RESISTOR	
R3001	ERJ3GEYJ330	M 33 OHM, J, 1/16W	
R3005	EXB28V101J	RESISTOR	
R3009	ERJ2GEJ220	M 22 OHM, 0.063W	
R3019	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3020	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3021	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3022	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3023	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3024	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3025	ERJ3GEYJ183	M 18K OHM, J, 1/16W	
R3026	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3027	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3028	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3029	ERJ3GEYJ183	M 18K OHM, J, 1/16W	
R3030	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R3032	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R3033	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R3034	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R3035	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R3036	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R3037	ERJ6ENF4700	M 470 OHM, 1/10W	
R3039	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3040	ERJ3GEYJ330	M 33 OHM, J, 1/16W	
R3044	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R3045	ERJ3EKF8200	RESISTOR	
R3048	ERJ3GEYJ330	M 33 OHM, J, 1/16W	
R3050	ERJ3EKF1501	M 1.5KOHM, 1/16W	
R3051	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3052	ERJ6GEYJ331	RESISTOR	
R3053	ERJ6GEYJ331	RESISTOR	
R3054	ERJ6GEYJ221	RESISTOR	
R3055	ERJ6GEYJ151	RESISTOR	
R3056	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3057	ERJ6ENF4700	M 470 OHM, 1/10W	
R3058	ERJ6ENF1401	M 1.4KOHM, 1/10W	
R3059	ERJ6ENF1001	M 1KOHM, 1/10W	
R3060	ERJ6ENF1401	M 1.4KOHM, 1/10W	
R3061	ERJ6ENF1001	M 1KOHM, 1/10W	
R3062	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3063	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3064	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3065	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3066	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3067	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3068	ERJ6ENF4700	M 470 OHM, 1/10W	
R3069	ERJ6ENF1500	M 150 OHM, 1/10W	
R3070	ERJ6ENF1500	M 150 OHM, 1/10W	
R3071	ERJ6ENF1200	M 120 OHM, 1/10W	
R3072	ERJ6ENF2701	M 2.7KOHM, 1/10W	
R3073	ERJ6ENF2701	M 2.7KOHM, 1/10W	
R3078	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R3079	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R3081	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3082	ERJ2GEJ220	M 22 OHM, 0.063W	
R3083	ERJ2GEJ220	M 22 OHM, 0.063W	
R3084	ERJ2GEJ220	M 22 OHM, 0.063W	
R3091	DIHG5608A002	RESISTOR	
R3094	ERJ3GEYJ152	M 1.5KOHM, J, 1/16W	
R3095	ERJ3GEYJ391	M 390 OHM, J, 1/16W	
R3102	EXB28V560J	RESISTOR ARRAY	
R3106	EXB28V220J	RESISTOR ARRAY	
R3107	ERJ2GEJ220	M 22 OHM, 0.063W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3108	ERJ2GEJ220	M 22 OHM, 0.063W	
R3109	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3110	ERJ2GEJ220	M 22 OHM, 0.063W	
R3111	EXB28V220J	RESISTOR ARRAY	
R3112	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3116	ERJ2GEJ560	M 56 OHM, 0.063W	
R3117	ERJ2GEJ560	M 56 OHM, 0.063W	
R3118	ERJ3GEYJ470	M 47 OHM, J, 1/16W	
R3119	EXB28V220J	RESISTOR ARRAY	
R3120	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3121	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3122	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3123	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3124	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3125	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3126	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3127	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3128	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R3129	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R3130	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R3131	EXB28V220J	RESISTOR ARRAY	
R3132	EXB28V103J	RESISTOR ARRAY	
R3133	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3134	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3135	DIHG5608A002	RESISTOR	
R3136	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3138	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3145	DIHG2208A002	RESISTOR	
R3146	EXB28V103J	RESISTOR ARRAY	
R3147	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R3148	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R3149	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R3150	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R3151	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3152	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R3153	DIHG2208A002	RESISTOR	
R3154	ERJ6GEYJ3R3	RESISTOR	
R3155	ERJ6GEYJ3R3	RESISTOR	
R3156	ERJ6GEYJ3R3	RESISTOR	
R3157	ERJ6GEYJ3R3	RESISTOR	
R3158	ERJ6GEYJ271	RESISTOR	
R3159	DIHG2208A002	RESISTOR	
R3160	DIHG2208A002	RESISTOR	
R3161	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3162	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3163	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3164	ERJ6GEYJ271	RESISTOR	
R3165	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3166	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3167	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3168	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R3169	ERJ6GEYJ332	RESISTOR	
R3170	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R3171	ERJ6GEYJ332	RESISTOR	
R3172	ERJ6GEYJ271	RESISTOR	
R3173	ERJ6GEYJ271	RESISTOR	
R3174	ERJ6GEYJ3R3	RESISTOR	
R3175	ERJ6GEYJ3R3	RESISTOR	
R3176	ERJ6GEYJ3R3	RESISTOR	
R3177	ERJ6GEYJ3R3	RESISTOR	
R3178	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R3179	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3180	ERJ3GEYJ330	M 33 OHM, J, 1/16W	
R3181	EXB28V220J	RESISTOR ARRAY	
R3182	ERJ2GEJ220	M 22 OHM, 0.063W	
R3184	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3185	ERJ3GEYJ183	M 18K OHM, J, 1/16W	
R3186	ERJ3GEYJ183	M 18K OHM, J, 1/16W	
R3187	ERJ3GEYJ104	M 100KOHM, J, 1/16W	
R3188	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3189	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R3191	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3192	ERJ3GEYJ103	M 10K OHM, J, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3193	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3194	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3195	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R3196	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3197	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3198	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3199	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3200	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R3201	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3202	D1HG2208A002	RESISTOR	
R3203	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R3204	EXB28V220J	RESISTOR ARRAY	
R3205	D1HG2208A002	RESISTOR	
R3206	ERJ3GEYJ273	RESISTOR	
R3207	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3208	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R3209	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3210	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R3211	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3212	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R3213	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3214	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3215	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3216	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3217	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3218	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3219	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3220	ERJ2GEJ220	M 22 OHM, 0.063W	
R3221	ERJ2GEJ560	M 56 OHM, 0.063W	
R3222	ERJ2GEJ560	M 56 OHM, 0.063W	
R3223	ERJ2GEJ560	M 56 OHM, 0.063W	
R3224	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3225	ERJ2GEJ220	M 22 OHM, 0.063W	
R3227	ERJ3EKF1501	M 1.5KOHM, 1/16W	
R3228	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3229	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3230	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3231	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3232	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3234	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3235	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3238	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3240	D1HG2208A002	RESISTOR	
R3241	D1HG2208A002	RESISTOR	
R3242	D1HG2208A002	RESISTOR	
R3243	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3244	D1HG2208A002	RESISTOR	
R3245	ERJ6ENF4990	M 499 OHM, 1/10W	
R3247	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3248	D1HG2208A002	RESISTOR	
R3252	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3253	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3254	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3255	D1HG2208A002	RESISTOR	
R3259	D1HG2208A002	RESISTOR	
R3261	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3263	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3271	EXB28V220J	RESISTOR ARRAY	
R3272	ERJ3GEYJ273	RESISTOR	
R3300	EXB28V560J	RESISTOR ARRAY	
R3312	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R3320	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3336	ERJ2GEJ220	M 22 OHM, 0.063W	
R3337	ERJ2GEJ220	M 22 OHM, 0.063W	
R3338	ERJ2GEJ220	M 22 OHM, 0.063W	
R3339	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3416	EXB28V472J	RESISTOR ARRAY	
R3417	EXB28V472J	RESISTOR ARRAY	
R3429	EXB28V220J	RESISTOR ARRAY	
R3433	ERJ2GEJ220	M 22 OHM, 0.063W	
R3436	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3446	EXB28V560J	RESISTOR ARRAY	
R3448	ERJ3GEYJ220	M 22 OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3451	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3452	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3459	EXB28V101J	RESISTOR	
R3463	ERJ3GEYJ101	M 100 OHM,J,1/16W	
R3481	ERJ2GEJ220	M 22 OHM, 0.063W	
R3482	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3515	EXB28V472J	RESISTOR ARRAY	
R3516	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3517	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3518	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3519	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3520	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3542	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3543	ERJ6GEYJ221	RESISTOR	
R3544	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3545	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3546	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3547	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3548	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3561	EXB28V220J	RESISTOR ARRAY	
R3564	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3573	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3575	EXB28V220J	RESISTOR ARRAY	
R3576	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3577	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3578	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3579	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3580	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3581	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3685	EXB28V472J	RESISTOR ARRAY	
R3686	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3693	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3695	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3699	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3700	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3701	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3702	ERJ12YJ100	M 10 OHM,J, 1/2W	
R3703	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3705	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3706	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3707	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3708	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3709	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3710	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3711	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3712	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3723	ERJ6ENF2001	M 2KOHM, 1/10W	
R3724	ERJ6ENF1801	M 1.8KOHM, 1/10W	
R3725	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3728	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3729	ERJ6ENF2001	M 2KOHM, 1/10W	
R3730	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3733	ERJ6ENF2001	M 2KOHM, 1/10W	
R3734	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3735	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3736	ERJ6ENF2700	M 270 OHM, 1/10W	
R3740	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3741	ERJ6ENF2700	M 270 OHM, 1/10W	
R3742	ERJ3GEYJ822	RESISTOR	
R3743	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3745	ERJ3GEYJ822	RESISTOR	
R3746	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3750	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3751	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3752	ERJ6ENF2001	M 2KOHM, 1/10W	
R3753	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3754	ERJ6ENF2001	M 2KOHM, 1/10W	
R3755	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3756	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3757	ERJ6ENF2700	M 270 OHM, 1/10W	
R3758	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3759	ERJ6ENF2700	M 270 OHM, 1/10W	
R3760	ERJ3GEYJ220	M 22 OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3766	ERJ3GEYJ822	RESISTOR	
R3767	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3768	ERJ3GEYJ822	RESISTOR	
R3769	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3774	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3775	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	
R3776	ERJ6ENF2700	M 270 OHM, 1/10W	
R3777	ERJ3GEYJ822	RESISTOR	
R3778	ERJ6ENF2001	M 2KOHM, 1/10W	
R3779	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3782	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3783	ERJ6ENF2700	M 270 OHM, 1/10W	
R3786	ERJ3GEYJ822	RESISTOR	
R3787	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3798	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	
R3799	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3800	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	
R3801	ERJ6ENF2001	M 2KOHM, 1/10W	
R3802	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3803	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3804	ERJ6ENF2700	M 270 OHM, 1/10W	
R3805	ERJ3GEYJ822	RESISTOR	
R3806	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3807	ERJ6ENF6201	M 6.2KOHM, 1/10W	
R3808	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R3809	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3810	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3811	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3812	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3813	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3814	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3815	ERJ3GEYJ560	M 56 OHM, J, 1/16W	
R3816	ERJ3GEYJ562	M 5.6KOHM, J, 1/16W	
R3818	ERJ6ENF2001	M 2KOHM, 1/10W	
R3819	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3822	ERJ6ENF6201	M 6.2KOHM, 1/10W	
R3827	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R3836	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3845	D1HG2208A002	RESISTOR	
R3847	D1HG2208A002	RESISTOR	
R3863	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3865	ERJ2GEJ220	M 22 OHM, 0.063W	
R3866	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3868	ERJ2GEJ102	M 1K OHM, 0.063W	
R3869	ERJ2GEJ272	M 2.7KOHM, 0.063W	
R3870	ERJ2GEJ750	M 75 OHM, 0.063W	
R3871	ERJ2GEJ750	M 75 OHM, 0.063W	
R3873	ERJ2GEJ222	RESISTOR	
R3874	ERJ2GEJ220	M 22 OHM, 0.063W	
R3878	ERJ2GEJ102	M 1K OHM, 0.063W	
R3879	D1HG2208A002	RESISTOR	
R3881	D1HG2208A002	RESISTOR	
R3883	ERJ2GEJ220	M 22 OHM, 0.063W	
R3884	D1HG2208A002	RESISTOR	
R3886	ERJ2GEJ750	M 75 OHM, 0.063W	
R3887	ERJ2GEJ272	M 2.7KOHM, 0.063W	
R3888	ERJ2GEJ750	M 75 OHM, 0.063W	
R3889	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3892	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R3894	D1HG2208A002	RESISTOR	
R3896	ERJ2GEJ220	M 22 OHM, 0.063W	
R3898	D1HG2208A002	RESISTOR	
R3899	D1HG2208A002	RESISTOR	
R3900	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3901	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3902	ERJ3GEYJ151	M 150 OHM, J, 1/16W	
R3903	ERJ2GEJ222	RESISTOR	
R3904	ERJ2GEJ272	M 2.7KOHM, 0.063W	
R3905	ERJ2GEJ112	RESISTOR	
R3906	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3907	ERJ3GEYJ821	RESISTOR	
R3908	ERJ3GEYJ681	M 680 OHM, J, 1/16W	
R3909	ERJ6ENF1000	M 100 OHM, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3910	ERJ3GEYJ471	M 470 OHM, J, 1/16W	
R3911	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3912	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3913	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3914	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3916	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3917	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3919	ERJ2GEJ220	M 22 OHM, 0.063W	
R3920	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3922	D1HG2208A002	RESISTOR	
R3923	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3924	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3925	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3926	D1HG2208A002	RESISTOR	
R3927	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3928	ERJ2GEJ220	M 22 OHM, 0.063W	
R3929	ERJ2GEJ220	M 22 OHM, 0.063W	
R3930	ERJ2GEJ220	M 22 OHM, 0.063W	
R3931	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3932	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R3933	ERJ3GEYJ222	M 2.2KOHM, J, 1/16W	
R3936	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R3938	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R3948	ERJ3GEYJ331	M 330 OHM, J, 1/16W	
R3978	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3979	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3980	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R3981	ERJ3GEYJ100	M 10 OHM, J, 1/16W	
R9601	ERJ6ENF3300	M 330 OHM, 1/10W	
R9602	ERJ3GEYJ563	M 56KOHM, J, 1/16W	
R9603	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R9604	ERJ3GEYJ103	M 10K OHM, J, 1/16W	
R9606	ERJ3GEYJ220	M 22 OHM, J, 1/16W	
R9608	ERJ3GEY0R00	M 0 OHM, 1/16W	
R9609	ERJ3GEY0R00	M 0 OHM, 1/16W	
R9701	ERJ1TYJ221	M 220 OHM, 1W	
R9702	ERJ1TYJ221	M 220 OHM, 1W	
R9703	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R9704	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R9705	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R9706	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R9707	ERJ3GEYJ102	M 1K OHM, J, 1/16W	
R9801	ERD25VJ1R0	RESISTOR	
R9802	ERJ3GEYJ223	M 22K OHM, J, 1/16W	
R9803	ERJ3GEYJ182	M 1.8KOHM, J, 1/16W	
R9804	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R9805	ERJ6GEY0R00	RESISTOR	
R9806	D1HG1018A002	RESISTOR	
R9807	ERJ6GEYJ101	RESISTOR	
R9808	ERJ6GEYJ101	RESISTOR	
R9809	ERJ6GEYJ391	RESISTOR	
R9810	ERJ3GEYJ223	M 22K OHM, J, 1/16W	
R9811	ERJ6GEYJ2R2	RESISTOR	
R9812	ERJ3GEYJ272	M 2.7KOHM, J, 1/16W	
R9813	ERJ6GEYJ101	RESISTOR	
R9814	ERJ3GEYJ272	M 2.7KOHM, J, 1/16W	
R9815	ERJ3GEYJ472	M 4.7KOHM, J, 1/16W	
R9816	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R9817	ERJ6GEY0R00	RESISTOR	
R9818	ERJ3GEYJ101	M 100 OHM, J, 1/16W	
R9819	ERJ6GEYJ101	RESISTOR	
R9820	ERJ6GEYJ101	RESISTOR	
R9821	ERJ6GEYJ101	RESISTOR	
R9822	ERJ6GEYJ101	RESISTOR	
R9823	ERJ6GEYJ101	RESISTOR	
R9824	ERJ6GEYJ101	RESISTOR	
R9825	ERJ6GEYJ101	RESISTOR	
R9826	ERJ6GEYJ101	RESISTOR	
R9827	ERJ3GEYJ182	M 1.8KOHM, J, 1/16W	
R9828	EXB38V103J	RESISTOR ARRAY	
R9829	EXB38V103J	RESISTOR ARRAY	
R9901	ERJ3GEYJ470	M 47 OHM, J, 1/16W	
R9902	ERJ6GEYJ560	M 56 OHM, J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R9903	ERJ6GEYJ181	RESISTOR	
R9904	ERJ6GEYJ181	RESISTOR	
R9905	ERJ6GEYJ181	RESISTOR	
R9906	ERJ6GEYJ471	RESISTOR	
R9950	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R9951	ERJ6ENF1501	RESISTOR	
R9952	ERJ6ENF1501	RESISTOR	
R9953	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R9954	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R9955	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R9956	ERJ6ENF3302	M 33KOHM, 1/10W	
R9957	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R9958	ERJ6ENF1501	RESISTOR	
R9959	ERJ6ENF1501	RESISTOR	
R9960	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R9961	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R9962	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R9963	ERJ6ENF3302	M 33KOHM, 1/10W	
R9964	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R9965	ERJ6ENF1501	RESISTOR	
R9966	ERJ6ENF1501	RESISTOR	
R9967	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R9968	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R9969	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R9970	ERJ6ENF3302	M 33KOHM, 1/10W	
R9971	ERJ3GEYJ470	M 47 OHM, J, 1/16W	
		[CAPACITORS]	
C2002	F2G0J4700010	CAPACITOR	
C2003	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2004	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2005	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2006	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2007	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2008	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2009	ECJ1VCH150J	CAPACITOR	
C2010	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2011	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2012	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2013	ECJ1VCH150J	CAPACITOR	
C2014	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2015	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2016	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2017	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2018	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2019	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2020	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2021	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2022	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2023	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2024	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2025	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2026	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2027	F2G0J4700010	CAPACITOR	
C2029	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2030	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2031	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2032	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2033	F2G0J4700010	CAPACITOR	
C2034	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2035	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2036	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2037	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2039	F2G0J4700010	CAPACITOR	
C2041	F2G0J4700010	CAPACITOR	
C2042	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2043	F2G0J4700010	CAPACITOR	
C2044	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2045	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2046	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2047	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2048	ECJ1VFC104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C2049	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2050	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2051	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2052	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2053	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2054	F2G0J4700010	CAPACITOR	
C2055	EEH0G221P	E 220UF, 4V	
C2056	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2057	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2058	F2G0J4700010	CAPACITOR	
C2059	F2G0J4700010	CAPACITOR	
C2060	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2061	F2G0J1010013	CAPACITOR	
C2062	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2076	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2077	EEFCD0K330R	CAPACITOR	
C2079	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2084	ECJ2FF1A106Z	C 10UF, 10V	
C2085	ECJ0EB1H102K	C 1000PF, 50V	
C2086	ECJ1VCH030C	C 3PF, 50V	
C2501	F2G0J4700010	CAPACITOR	
C2502	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2503	F2G0J1010013	CAPACITOR	
C2504	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2506	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2507	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2508	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2510	ECJ1VCH150J	C 15PF, J, 50V	
C2511	ECJ1VCH150J	C 15PF, J, 50V	
C2512	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2513	F2G0J4700010	CAPACITOR	
C2514	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2515	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2516	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2517	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2518	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2519	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2520	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2521	F2G0J4700010	CAPACITOR	
C2522	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2523	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2524	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2525	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2526	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2527	ECJ1VCH471J	C 470PF, J, 50V	
C2528	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2529	F2G0J4700010	CAPACITOR	
C2530	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2531	ECJ1VCH100C	C 10PF, 50V	
C2532	ECJ1VCH100C	C 10PF, 50V	
C2533	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2534	F2G0J4700010	CAPACITOR	
C2535	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2536	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2537	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2541	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2543	F2G0J4700010	CAPACITOR	
C2547	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2548	ECJ1VFC1A105Z	C 1UF, Z, 50V	
C2549	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2550	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2551	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2552	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2553	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2554	ECJ1VB1H103K	C 0.01UF, K, 50V	
C2556	ECJ1VB1H103K	C 0.01UF, K, 50V	
C2558	ECJ1VCH101J	C 100PF, J, 50V	
C2559	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2560	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2561	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2562	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2563	ECJ1VFC104Z	C 0.1UF, Z, 16V	
C2564	ECJ1VFC104Z	C 0.1UF, Z, 16V	



Ref. No.	Part No.	Part Name & Description	Remarks
C2581	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2582	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2583	EEHB0G221P	E 220UF, 4V	
C2584	EEHB0G221P	E 220UF, 4V	
C2585	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2586	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2587	ECJ1VF1A105Z	C 1UF, Z, 50V	
C2589	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2590	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2591	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2592	ECJ2FF1A106Z	C 10UF, 10V	
C2593	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2594	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2595	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3000	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3001	F2G0J3300014	CAPACITOR	
C3002	ECJ0EB1H102K	C 1000PF, 50V	
C3003	F2G0J3300014	CAPACITOR	
C3004	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3007	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3010	F2G1C1000013	CAPACITOR	
C3011	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3014	ECJ1VC1H680J	CAPACITOR	
C3017	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3018	ECJ1VC1H680J	CAPACITOR	
C3019	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3020	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3023	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3025	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3027	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3028	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3029	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3030	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3031	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3032	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3033	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3034	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3035	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3036	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3037	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3038	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3039	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3040	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3041	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3042	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3043	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3044	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3045	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3046	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3047	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3048	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3051	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3052	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3053	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3054	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3056	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3058	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3059	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3060	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3061	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3062	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3063	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3064	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3065	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3066	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3067	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3068	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3069	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3070	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3071	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3072	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3074	EEHP1C100R	E 10UF, 16V	
C3075	EEHP1C100R	E 10UF, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3076	F2G1C1000013	CAPACITOR	
C3077	F2G1C1000013	CAPACITOR	
C3078	EEHB0J330R	E 33UF, 6.3V	
C3079	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3080	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3081	EEHB0J330R	E 33UF, 6.3V	
C3082	EEHP1C100R	E 10UF, 16V	
C3083	EEHP1C100R	E 10UF, 16V	
C3084	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3085	F2G0J3300014	CAPACITOR	
C3086	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3087	F2G0J3300014	CAPACITOR	
C3088	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3089	F2G0J3300014	CAPACITOR	
C3090	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3091	EEHP0J470P	E 47UF, 6.3V	
C3092	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3093	EEHP0J470P	E 47UF, 6.3V	
C3094	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3095	EEHP0J470P	E 47UF, 6.3V	
C3097	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3099	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3100	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3101	F2G1C1000013	CAPACITOR	
C3104	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3105	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3106	ECJ1VC1H151J	CAPACITOR	
C3107	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3108	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3109	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3110	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3111	ECJ1VB1H472K	C 4700PF, K, 50V	
C3112	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3113	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3114	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3115	ECJ2FF1A106Z	C 10UF, 10V	
C3116	ECJ2FF1A106Z	C 10UF, 10V	
C3117	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3118	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3119	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3120	ECJ1VC1H221J	CAPACITOR	
C3121	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3122	ECJ2VC1H391J	CAPACITOR	
C3123	F2G0J4700010	CAPACITOR	
C3124	ECJ1VC1H181J	CAPACITOR	
C3125	F2G1C1000013	CAPACITOR	
C3126	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3128	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3129	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3130	EEFUD0J101R	CAPACITOR	
C3131	ECJ1VF1H473Z	CAPACITOR	
C3132	ECJ1VF1H473Z	CAPACITOR	
C3133	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3134	ECJ1VF1H473Z	CAPACITOR	
C3135	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3137	ECJ2FF1A106Z	C 10UF, 10V	
C3138	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3139	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3140	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3141	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3142	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3143	ECJ0EB1C822K	CAPACITOR	
C3144	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3145	ECJ2FF1A106Z	C 10UF, 10V	
C3147	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3148	ECJ0EB1A823K	CAPACITOR	
C3149	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3150	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3152	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3153	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3154	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3155	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3156	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3157	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3158	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3159	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3160	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3161	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3162	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3163	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3164	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3165	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3166	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3169	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3170	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3171	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3172	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3173	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3174	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3175	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3176	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3177	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3178	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3179	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3180	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3181	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3182	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3183	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3184	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3185	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3186	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3187	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3188	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3189	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3190	ECJ1VC1H150J	C 15PF, J, 50V	
C3191	ECJ1VC1H150J	C 15PF, J, 50V	
C3192	ECJ1VC1H470J	CAPACITOR	
C3193	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3194	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3195	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3196	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3197	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3198	ECJ2FF1A106Z	C 10UF, 10V	
C3199	ECJ2FF1A106Z	C 10UF, 10V	
C3200	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3300	F2G1E4R70007	CAPACITOR	
C3303	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3304	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3305	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3306	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3307	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3308	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3310	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3312	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3315	EEH0G221P	E 220UF, 4V	
C3316	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3317	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3318	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3319	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3320	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3321	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3322	F2G1E4R70007	CAPACITOR	
C3323	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3324	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3325	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3327	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3328	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3329	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3330	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3331	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3333	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3334	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3335	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3336	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3337	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3338	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3339	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3356	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3362	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3384	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3385	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3390	EEH0J330R	E 33UF, 6.3V	
C3392	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3393	EEH0P1C100R	E 10UF, 16V	
C3394	EEH0J330R	E 33UF, 6.3V	
C3397	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3398	ECJ1VC1H101J	C 100PF, J, 50V	
C3399	ECJ1VC1H101J	C 100PF, J, 50V	
C3401	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3402	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3404	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3421	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3422	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3431	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3432	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3640	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3641	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3642	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3643	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3644	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3645	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3646	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3647	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3648	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3649	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3650	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3651	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3653	F2G1E3300010	CAPACITOR	
C3654	F2G1E3300010	CAPACITOR	
C3655	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3656	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3657	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3658	F2G1E3300010	CAPACITOR	
C3659	F2G1E3300010	CAPACITOR	
C3660	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3661	F2G1E3300010	CAPACITOR	
C3662	F2G1E3300010	CAPACITOR	
C3663	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3664	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3667	F2G1E3300010	CAPACITOR	
C3669	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3671	F2G1E3300010	CAPACITOR	
C3672	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3675	F2G1E3300010	CAPACITOR	
C3676	F2G1E3300010	CAPACITOR	
C3679	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3684	F2G0J4700010	CAPACITOR	
C3689	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3690	ECJ1VC1H471J	C 470PF, J, 50V	
C3691	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3692	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3693	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3694	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3695	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3696	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3697	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3698	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3699	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3700	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3701	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3702	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3703	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3704	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3705	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3706	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3707	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3708	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3709	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3710	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3711	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3712	F2G0J1010013	ELECTROLYTIC CAPACITOR	
C3716	ECJ1VB1A334K	CAPACITOR	
C3717	ECJ1VB1A334K	CAPACITOR	
C3718	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3719	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3720	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3721	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3722	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3723	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3724	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3725	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3726	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3727	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3728	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3729	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3730	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3731	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3732	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3733	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3734	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3735	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3736	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3737	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3738	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3739	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3740	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3741	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3742	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3744	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3745	ECJ1VC1H121J	CAPACITOR	
C3746	ECJ1VC1H471J	C 470PF, J, 50V	
C3747	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3748	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3749	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3750	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3751	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3752	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3753	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3754	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3755	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3756	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3757	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3758	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3759	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3760	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3762	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3763	F2G1E4R70007	CAPACITOR	
C3764	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3765	EEHBOG101R	E 100UF, 4V	
C3766	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3767	EEHBOG101R	E 100UF, 4V	
C3769	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3781	F2G1E4R70007	CAPACITOR	
C3785	F2G1E3300010	CAPACITOR	
C3788	EEHBOG101R	E 100UF, 4V	
C3790	F2G0J1010013	ELECTROLYTIC CAPACITOR	
C3791	F2G0J1010013	ELECTROLYTIC CAPACITOR	
C3792	F2G1E4R70007	CAPACITOR	
C3794	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3795	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3796	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3797	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3798	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3799	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3800	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3803	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3804	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3805	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3806	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9602	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9702	F4D276050004	CAPACITOR	
C9703	F4D276050004	CAPACITOR	

Ref. No.	Part No.	Part Name & Description	Remarks
C9704	F4D276050004	CAPACITOR	
C9705	F4D276050004	CAPACITOR	
C9706	F4D276050004	CAPACITOR	
C9801	ECJ1VF1A105Z	C 1UF, Z, 50V	
C9802	ECJ1VF1A105Z	C 1UF, Z, 50V	
C9803	ECJ1VF1A105Z	C 1UF, Z, 50V	
C9804	EEHBOJ470R	E 47UF, 6.3V	
C9805	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9806	ECJ1VF1A105Z	C 1UF, Z, 50V	
C9807	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9808	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9814	ECJ1VF1A105Z	C 1UF, Z, 50V	
C9815	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9818	ECJ1VB1H103K	C 0.01UF, K, 50V	
C9820	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9821	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9822	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9823	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9824	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9825	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9826	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9827	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9828	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9901	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9902	EEHBOJ470R	E 47UF, 6.3V	
C9950	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9951	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9952	EEHBOJ470R	E 47UF, 6.3V	
[OTHERS]			
A1	K1MY06BA0008	6P CONNECTOR	
A2	K1MY09BA0008	9P CONNECTOR	
A3	K1MY13AA0006	13P CONNECTOR	
A5	K1KA11BA0014	11P CONNECTOR	
A6	K1KA12BA0014	12P CONNECTOR	
A7	K1KA03BA0014	3P CONNECTOR	
A8	K1KA02BA0014	2P CONNECTOR	
A9	K1KA02BA0047	2P CONNECTOR	
A10	K1KA02B00247	2P CONNECTOR	
A11	K1KA02BA0047	2P CONNECTOR	
A12	K1KA03BA0014	3P CONNECTOR	
A20	K1KA04BA0047	4P CONNECTOR	
A21	K1KA04BA0014	4P CONNECTOR	
A22	K1KA08BA0047	8P CONNECTOR	
A23	K1KA02BA0047	2P CONNECTOR	
A24	K1KA04BA0047	4P CONNECTOR	
A25	K1KA03BA0047	3P CONNECTOR	
A26	K1KA03BA0047	3P CONNECTOR	
A27	K1KA03BA0047	3P CONNECTOR	
A30	K1KA03BA0047	3P CONNECTOR	
A31	K1KA04BA0047	4P CONNECTOR	
A32	K1KA03BA0047	3P CONNECTOR	
A34	K1KA04BA0047	4P CONNECTOR	
A40	K1KA08BA0014	8P CONNECTOR	
A41	K1MY19B00002	19P CONNECTOR	
A42	K1KA06BA0050	6P CONNECTOR	
A43	K1KA10BA0051	10P CONNECTOR	
A61	K1KA06BA0047	6P CONNECTOR	
A62	K1KA06BA0047	6P CONNECTOR	
CW1	K1KA03AA0263	3P CONNECTOR	
D1	K1KA04AA0193	4P CONNECTOR	
J1	K1MY13BA0031	CONNECTOR	
R1	K1MY09BA0014	9P CONNECTOR	
S1	K1MY06BA0014	6P CONNECTOR	
JK2001	K2LC108B0064	TERMINAL	
JK2003	K1FB124B0026	TERMINAL	
JK3001	K1CB204BA002	TERMINAL	
JK3002	K1FB115B0102	TERMINAL	
JK3003	K1QBB5AB0005	CONNECTOR	
JK3004	K1QBB1CB0005	TERMINAL	
JK9801	TJS1A7250	JACK	
JK9802	K2HC103B0031	TERMINAL	

Ref. No.	Part No.	Part Name & Description	Remarks
JK9803	K1FA109B0061	CONNECTOR	
JK9804	K1FB109B0070	CONNECTOR	
JK9805	K1FB109B0070	CONNECTOR	
B2501	BCR20V4	HOLDER	
PC9601	B3NBB0000005	I.C	
RM9901	B3RAD0000083	REMOTE CONTROL RECEIVER	
RM9950	B3RAD0000083	REMOTE CONTROL RECEIVER	
SW9950	EVQ11G05R	SWITCH	
SW9951	EVQ11G05R	SWITCH	
SW9952	EVQ11G05R	SWITCH	
SW9953	EVQ11G05R	SWITCH	
SW9954	EVQ11G05R	SWITCH	
SW9955	EVQ11G05R	SWITCH	
SW9956	EVQ11G05R	SWITCH	
SW9957	EVQ11G05R	SWITCH	
SW9958	EVQ11G05R	SWITCH	
SW9959	EVQ11G05R	SWITCH	
SW9960	EVQ11G05R	SWITCH	
SW9961	EVQ11G05R	SWITCH	
SW9962	EVQ11G05R	SWITCH	
SW9963	EVQ11G05R	SWITCH	
SW9964	EVQ11G05R	SWITCH	
SW9965	EVQ11G05R	SWITCH	
X2002	H1A6605B0004	CRYSTAL	
X2003	H0J250500049	CRYSTAL	
X2501	H0J983400016	CRYSTAL	
X2502	H0J327200114	CRYSTAL	
X3000	H0J202500002	CRYSTAL	
RTL	TXN/A2VKC6	CIRCUIT BOARD A	
RTL	TXNCW1VKC6	CIRCUIT BOARD CW	
RTL	TXN/D1VJW2	CIRCUIT BOARD D	
RTL	TXN/J1VJW2-R	CIRCUIT BOARD J	
RTL	TXN/R1VJW2-R	CIRCUIT BOARD R	
RTL	TXN/S2VJW2-R	CIRCUIT BOARD S	
	N0ZZ00000016	CIRCUIT BOARD BALLAST	
	TXAUX01VKC6	POWER UNIT	D5600U/UL, DW5000U/UL
	TXAUX01QDBZ	POWER UNIT	D5600E/EL, DW5000E/EL

# Control Commands

## Using the Serial Terminals

### 1 Basic Format

Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.

Basic control command (without parameter)

Start (STX)	ID	Separator (semicolon)	Command	End (ETX)
1 byte	4 bytes	1 byte	3 bytes	1 byte

Basic control command (with parameters)

Start (STX)	ID	Separator (semicolon)	Command	Separator (colon)	Parameters	End (ETX)
1 byte	4 bytes	1 byte	3 bytes	1 byte	Undefined length	1 byte

ID of the basic control command

ID	4 bytes String	ID	4 bytes String	ID	4 bytes String	ID	4 bytes String
ALL	ADZZ	ID23	AD23	ID46	AD46	Group E	AD0E
ID1	AD01	ID24	AD24	ID47	AD47	Group F	AD0F
ID2	AD02	ID25	AD25	ID48	AD48	Group G	AD0G
ID3	AD03	ID26	AD26	ID49	AD49	Group H	AD0H
ID4	AD04	ID27	AD27	ID50	AD50	Group I	AD0I
ID5	AD05	ID28	AD28	ID51	AD51	Group J	AD0J
ID6	AD06	ID29	AD29	ID52	AD52	Group K	AD0K
ID7	AD07	ID30	AD30	ID53	AD53	Group L	AD0L
ID8	AD08	ID31	AD31	ID54	AD54	Group M	AD0M
ID9	AD09	ID32	AD32	ID55	AD55	Group N	AD0N
ID10	AD10	ID33	AD33	ID56	AD56	Group O	AD0O
ID11	AD11	ID34	AD34	ID57	AD57	Group P	AD0P
ID12	AD12	ID35	AD35	ID58	AD58	Group Q	AD0Q
ID13	AD13	ID36	AD36	ID59	AD59	Group R	AD0R
ID14	AD14	ID37	AD37	ID60	AD60	Group S	AD0S
ID15	AD15	ID38	AD38	ID61	AD61	Group T	AD0T
ID16	AD16	ID39	AD39	ID62	AD62	Group U	AD0U
ID17	AD17	ID40	AD40	ID63	AD63	Group V	AD0V
ID18	AD18	ID41	AD41	ID64	AD64	Group W	AD0W
ID19	AD19	ID42	AD42	Group A	AD0A	Group X	AD0X
ID20	AD20	ID43	AD43	Group B	AD0B	Group Y	AD0Y
ID21	AD21	ID44	AD44	Group C	AD0C	Group Z	AD0Z
ID22	AD22	ID45	AD45	Group D	AD0D		

## Response (Callback) of the basic control command

In the period when commands can be accepted

Differs according to each command.

In the period when commands cannot be accepted, or the command does not exist

Hexadecimal	02h	45h	52h	34h	30h	31h	03h
Character		E	R	4	0	1	

In case of the parameter error or REMOTE2 effective

Hexadecimal	02h	45h	52h	34h	30h	31h	03h
Character		E	R	4	0	2	

Attention:

- No command may be sent or received for 10 to 60 seconds after the lamp starts lighting. Try sending any command after that period has elapsed.
- When sending several commands, be sure to wait for a response from the projector, and send the next command after 0.5 seconds or more pass.
- It might take time by the time the response returns because the command is processed in the projector. Set the time-out to ten seconds or more.

Note:

- This projector will respond to the computer only in the following cases:

If the sent ID coincides with the projector ID,

VPS SYSTEM in RS232C settings of this projector is MASTER and the sent ID is ALL, or

If Group (A-Z) of the sent ID coincides with GROUP in RS232C settings of this projector and GROUP in RS232C settings of this projector is MASTER.

## 2 Basic Control Command

### 2.1 Power ON (Lamp ON)

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	50h	4Fh	4Eh	03h
Character		A	D	Z	Z	;	P	O	N	

#### ■ Response (Callback)

In the period when the command can be accepted (This command in power-on condition is included)

Hexadecimal	02h	50h	4Fh	4Eh	03h
Character		P	O	N	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	△

#### ■ Note:

- When you confirm whether to have succeeded in power-on, confirm it by QPW (query power condition) command after receiving the callback of PON command.
- Calls back PON even if REMOTE2 is effective.

### 2.2 Power OFF (Standby)

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	50h	4Fh	46h	03h
Character		A	D	Z	Z	;	P	O	F	

#### ■ Response (Callback)

In the period when the command can be accepted (This command in power-off condition is included)

Hexadecimal	02h	50h	4Fh	46h	03h
Character		P	O	F	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	△

#### ■ Note:

- When you confirm whether to have succeeded in power-off, confirm it by QPW (Query Power) command after receiving the callback of POF command.
- Calls back POF even if REMOTE2 is effective.

### 2.3 FREEZE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	46h	5Ah	3Ah	*1	03h
Character		A	D	Z	Z	;	O	F	Z	:	*2	

#### ■ Parameters (\*1, \*2)

	Freeze OFF	Freeze ON
Hexadecimal	30h	31h
Character	0	1

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	46h	5Ah	3Ah	*1	03h
Character		O	F	Z	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	×	○	○	○

### 2.4 AUTO SETUP

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	41h	53h	03h
Character		A	D	Z	Z	;	O	A	S	

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	41h	53h	03h
Character		O	A	S	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	×	×	○



## 2.5 SHUTTER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	53h	48h	3Ah	*1	03h
Character		A	D	Z	Z	;	O	S	H	:	*2	

### ■ Parameters (\*1, \*2)

	Shutter OFF	Shutter ON
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	48h	3Ah	*1	03h
Character		O	S	H	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	×

### ■ Note:

- REMOTE2 is given to priority. Calls back ER402 when the parameter is different from the setting of REMOTE2.

## 2.6 Input Select

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	49h	49h	53h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	I	I	S	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	RGB1			RGB2			VIDEO			S-VIDEO			DVI		
Hexadecimal	52h	47h	31h	52h	47h	32h	56h	49h	44h	53h	56h	44h	44h	56h	49h
Character	R	G	1	R	G	2	V	I	D	S	V	D	D	V	I

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	49h	49h	53h	3Ah	*1	*3	*5	03h
Character		I	I	S	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	○	○	△

### ■ Note:

- REMOTE2 is given to priority. Calls back ER402 if the input select of REMOTE2 is available.

## 2.7 TEST PATTERN

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	54h	53h	3Ah	*1	*3	03h
Character		A	D	Z	Z	;	O	T	S	:	*2	*4	

### ■ Parameters (\*1, \*2, \*3, \*4)

	OFF		White		Black		Flag		Window		Focus		Colorbar	
Hexadecimal	30h	30h	30h	31h	30h	30h	37h	30h	38h	35h	30h	37h	30h	38h
Character	0	0	0	1	0	0	7	0	8	5	0	7	0	8

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	54h	53h	3Ah	*1	*3	03h
Character		O	T	S	:	*2	*4	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.8 ON SCREEN

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	4Fh	53h	3Ah	*1	03h
Character		A	D	Z	Z	;	O	O	S	:	*2	

### ■ Parameters (\*1, \*2)

	OSD OFF	OSD ON
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Fh	53h	3Ah	*1	03h
Character		O	O	S	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	○	○	○

## 2.9 MENU key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	4Dh	4Eh	03h
Character		A	D	Z	Z	;	O	M	N	

### ■ Response (Callback)

In the period when the command can be accepted

	02h	4Fh	4Dh	4Eh	03h
Character		O	M	N	

## 2.10 ENTER key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	45h	4Eh	03h
Character		A	D	Z	Z	;	O	E	N	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	45h	4Eh	03h
Character		O	E	N	

## 2.11 Up (↑) key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	43h	55h	03h
Character		A	D	Z	Z	;	O	C	U	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	55h	03h
Character		O	C	U	

## 2.12 Down (↓) key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	43h	44h	03h
Character		A	D	Z	Z	;	O	C	D	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	44h	03h
Character		O	C	D	

## 2.13 Left (←) key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	43h	4Ch	03h
Character		A	D	Z	Z	;	O	C	L	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	4Ch	03h
Character		O	C	L	

## 2.14 Right (→) key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	43h	52h	03h
Character		A	D	Z	Z	;	O	C	R	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	52h	03h
Character		O	C	R	

## 2.15 STD key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	53h	54h	03h
Character		A	D	Z	Z	;	O	S	T	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	54h	03h
Character		O	S	T	

## 2.16 FUNC1 key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	46h	43h	31h	03h
Character		A	D	Z	Z	;	F	C	1	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	46h	43h	31h	03h
Character		F	C	1	

## 2.17 SYSTEM SEL key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	53h	4Ch	03h
Character		A	D	Z	Z	;	O	S	L	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	4Ch	03h
Character		O	S	L	

## 2.18 Numeric key

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	4Eh	4Bh	3Ah	*1	03h
Character		A	D	Z	Z	;	O	N	K	:	*2	

### ■ Parameters (\*1, \*2)

	0 key	1 key	2 key	3 key	4 key	5 key	6 key	7 key	8 key	9 key
Hexadecimal	30h	31h	32h	33h	34h	35h	36h	37h	38h	39h
Character	0	1	2	3	4	5	6	7	8	9

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Eh	4Bh	3Ah	*1	03h
Character		O	N	K	:	*2	

## 2.19 LAMP SELECT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Ch	50h	4Dh	3Ah	*1	03h
Character		A	D	Z	Z	;	L	P	M	:	*2	

### ■ Parameters (\*1, \*2)

	DUAL		SINGLE		LAMP1		LAMP2	
Hexadecimal	30h		31h		32h		33h	
Character	0		1		2		3	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Ch	50h	4Dh	3Ah	*1	03h
Character		L	P	M	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	○	○	○	×	○	○

## 2.20 Installation (FRONT/REAR & DESK/CEILING)

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	49h	4Ch	3Ah	*1	03h
Character		A	D	Z	Z	;	O	I	L	:	*2	

### ■ Parameters (\*1, \*2)

	FRONT/DESK		REAR/DESK		FRONT/CEILING		REAR/CEILING	
Hexadecimal	30h		31h		32h		33h	
Character	0		1		2		3	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	49h	4Ch	3Ah	*1	03h
Character		O	I	L	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	○	○	○	×	○	○

## 2.21 LAMP POWER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	4Ch	50h	3Ah	*1	03h
Character		A	D	Z	Z	;	O	L	P	:	*2	

### ■ Parameters (\*1, \*2)

	HIGH		LOW	
Hexadecimal	30h		31h	
Character	0		1	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Ch	50h	3Ah	*1	03h
Character		O	L	P	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	○	○	○	×	○	○

## 2.22 SUB MEMORY CHANGE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	43h	53h	3Ah	*1	*3	03h
Character		A	D	Z	Z	;	O	C	S	:	*2	*4	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

Sets 00 when the sub memory is not used.

	Not used		1		2		3		4		5		6		7		8	
Hexadecimal	30h	30h	30h	31h	30h	32h	30h	33h	30h	34h	30h	35h	30h	36h	30h	37h	30h	38h
Character	0	0	0	1	0	2	0	3	0	4	0	5	0	6	0	7	0	8

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	43h	53h	3Ah	*1	*3	03h
Character		O	C	S	:	*2	*4	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.23 SUB MEMORY STORE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	45h	53h	3Ah	*1	*3	03h
Character		A	D	Z	Z	;	O	E	S	:	*2	*4	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

Sets 00 when the sub memory is not used.

	Not used		1		2		3		4		5		6		7		8	
Hexadecimal	30h	30h	30h	31h	30h	32h	30h	33h	30h	34h	30h	35h	30h	36h	30h	37h	30h	38h
Character	0	0	0	1	0	2	0	3	0	4	0	5	0	6	0	7	0	8

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	45h	53h	3Ah	*1	*3	03h
Character		O	E	S	:	*2	*4	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	×	○

## 2.24 SUB MEMORY DELETE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	44h	53h	3Ah	*1	*3	03h
Character		A	D	Z	Z	;	O	D	S	:	*2	*4	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	1		2		3		4		5		6		7		8	
Hexadecimal	30h	31h	30h	32h	30h	33h	30h	34h	30h	35h	30h	36h	30h	37h	30h	38h
Character	0	1	0	2	0	3	0	4	0	5	0	6	0	7	0	8

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	44h	53h	3Ah	*1	*3	03h
Character		O	D	S	:	*2	*4	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.25 PICTURE MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	50h	4Dh	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	P	M	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	DYNAMIC			GRAPHIC			STANDARD			CINEMA			NATURAL		
Hexadecimal	44h	59h	4Eh	47h	52h	41h	53h	54h	44h	43h	49h	4Eh	4Eh	41h	54h
Character	D	Y	N	G	R	A	S	T	D	C	I	N	N	A	T

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	50h	4Dh	3Ah	*1	*3	*5	03h
Character		V	P	M	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.26 COLOR

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	43h	4Fh	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	C	O	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			98			99			100		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	39h	38h	30h	39h	39h	31h	30h	30h
Character	0	0	0	0	0	1	0	0	2	0	9	8	0	9	9	1	0	0

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	4Fh	3Ah	*1	*3	*5	03h
Character		V	C	O	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.27 TINT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	54h	4Eh	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	T	N	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			58			59			60		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	35h	38h	30h	35h	39h	30h	36h	30h
Character	0	0	0	0	0	1	0	0	2	0	5	8	0	5	9	0	6	0

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	54h	4Eh	3Ah	*1	*3	*5	03h
Character		V	T	N	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.28 COLOR TEMP.

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	54h	45h	3Ah	*1	*3	03h
Character		A	D	Z	Z	;	O	T	E	:	*2	*4	

### ■ Parameters (\*1, \*2, \*3, \*4)

	DEFAULT		USER		MIDDLE		HIGH	
Hexadecimal	31h	30h	30h	34h	30h	31h	30h	32h
Character	1	0	0	4	0	1	0	2

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	54h	45h	3Ah	*1	*3	03h
Character		O	T	E	:	*2	*4	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.29 CONTRAST

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	43h	4Eh	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	C	N	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			61			62			63		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	36h	31h	30h	36h	32h	30h	36h	33h
Character	0	0	0	0	0	1	0	0	2	0	6	1	0	6	2	0	6	3

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	4Eh	3Ah	*1	*3	*5	03h
Character		V	C	N	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

### 2.30 BRIGHT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	42h	52h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	B	R	:	*2	*4	*6	

#### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			61			62			63		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	36h	31h	30h	36h	32h	30h	36h	33h
Character	0	0	0	0	0	1	0	0	2	0	6	1	0	6	2	0	6	3

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	42h	52h	3Ah	*1	*3	*5	03h
Character		V	B	R	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

### 2.31 SHARPNESS

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	53h	52h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	S	R	:	*2	*4	*6	

#### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			13			14			15		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	31h	33h	30h	31h	34h	30h	31h	35h
Character	0	0	0	0	0	1	0	0	2	0	1	3	0	1	4	0	1	5

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	52h	3Ah	*1	*3	*5	03h
Character		V	S	R	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

### 2.32 NR

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	4Eh	53h	3Ah	*1	03h
Character		A	D	Z	Z	;	V	N	S	:	*2	

#### ■ Parameters (\*1, \*2)

	OFF		ON or 1		2		3	
Hexadecimal	30h		31h		32h		33h	
Character	0		1		2		3	

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	4Eh	53h	3Ah	*1	03h
Character		V	N	S	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

### 2.33 AI

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	41h	49h	3Ah	*1	03h
Character		A	D	Z	Z	;	O	A	I	:	*2	

#### ■ Parameters (\*1, \*2)

	OFF		ON	
Hexadecimal	30h		31h	
Character	0		1	

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	41h	49h	3Ah	*1	03h
Character		O	A	I	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.34 TV-SYSTEM

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	53h	47h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	S	G	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	AUTO1			AUTO2			NTSC		
Hexadecimal	41h	54h	31h	41h	54h	32h	4Eh	54h	53h
Character	A	T	1	A	T	2	N	T	S
	NTSC4.43			PAL			PAL-M		
Hexadecimal	4Eh	34h	34h	50h	41h	4Ch	50h	41h	4Dh
Character	N	4	4	P	A	L	P	A	M
	PAL-N			SECAM			PAL60		
Hexadecimal	50h	41h	4Eh	53h	45h	43h	50h	36h	30h
Character	P	A	N	S	E	C	P	6	0

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	47h	3Ah	*1	*3	*5	03h
Character		V	S	G	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.35 POSITION H

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	54h	48h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	T	H	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	54h	48h	3Ah	*1	*3	*5	03h
Character		V	T	H	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.36 POSITION V

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	54h	56h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	T	V	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	54h	56h	3Ah	*1	*3	*5	03h
Character		V	T	V	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.37 ASPECT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	53h	45h	3Ah	*1	03h
Character		A	D	Z	Z	;	V	S	E	:	*2	

### ■ Parameters (\*1, \*2)

	AUTO		4:3		16:9		S4:3		HV FIT	
Hexadecimal	30h		31h		32h		33h		36h	
Character	0		1		2		3		6	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	53h	45h	3Ah	*1	03h
Character		V	S	E	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.38 ZOOM H

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	5Ah	48h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	O	Z	H	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			997			998			999		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	39h	39h	37h	39h	39h	38h	39h	39h	39h
Character	0	0	0	0	0	1	0	0	2	9	9	7	9	9	8	9	9	9

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	5Ah	48h	3Ah	*1	*3	*5	03h
Character		O	Z	H	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.39 ZOOM V

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	5Ah	56h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	O	Z	V	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			997			998			999		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	39h	39h	37h	39h	39h	38h	39h	39h	39h
Character	0	0	0	0	0	1	0	0	2	9	9	7	9	9	8	9	9	9

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	5Ah	56h	3Ah	*1	*3	*5	03h
Character		O	Z	V	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.40 CLOCK PHASE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	43h	50h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	C	P	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			29			30			31		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	32h	39h	30h	33h	30h	30h	33h	31h
Character	0	0	0	0	0	1	0	0	2	0	2	9	0	3	0	0	3	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	50h	3Ah	*1	*3	*5	03h
Character		V	C	P	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> PR <sub>1</sub>	YP <sub>B</sub> PR <sub>2</sub>	DVI
×	×	○	○	○	○	×

## 2.41 TOTAL DOTS

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	54h	44h	3Ah	*1	*3	*5	*7	03h
Character		A	D	Z	Z	;	V	T	D	:	*2	*4	*6	*8	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	330				331				4093				4096			
Hexadecimal	30h	33h	33h	30h	30h	33h	33h	31h	34h	30h	39h	33h	34h	30h	39h	34h
Character	0	3	3	0	0	3	3	1	4	0	9	3	4	0	9	4

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	54h	44h	3Ah	*1	*3	*5	*7	03h
Character		V	T	D	:	*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> PR <sub>1</sub>	YP <sub>B</sub> PR <sub>2</sub>	DVI
×	×	○	○	×	×	×



## 2.42 DISPLAY DOTS

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	44h	44h	3Ah	*1	*3	*5	*7	03h
Character		A	D	Z	Z	;	V	D	D	:	*2	*4	*6	*8	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	300				301				2045				2046			
Hexadecimal	30h	33h	30h	30h	30h	33h	30h	31h	24h	30h	34h	35h	32h	30h	34h	36h
Character	0	3	0	0	0	3	0	1	2	0	4	5	2	0	4	6

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	44h	44h	3Ah	*1	*3	*5	*7	03h
Character		V	D	D	:	*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

## 2.43 TOTAL LINES

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	54h	4Ch	3Ah	*1	*3	*5	*7	03h
Character		A	D	Z	Z	;	V	T	L	:	*2	*4	*6	*8	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	211				212				2046				2047			
Hexadecimal	30h	32h	31h	31h	30h	32h	31h	32h	24h	30h	34h	36h	32h	30h	34h	37h
Character	0	2	1	1	0	2	1	2	2	0	4	6	2	0	4	7

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	54h	4Ch	3Ah	*1	*3	*5	*7	03h
Character		V	T	L	:	*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

## 2.44 DISPLAY LINES

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	44h	4Ch	3Ah	*1	*3	*5	*7	03h
Character		A	D	Z	Z	;	V	D	L	:	*2	*4	*6	*8	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	200				201				1199				1200			
Hexadecimal	30h	32h	30h	30h	30h	32h	30h	31h	21h	31h	39h	39h	31h	32h	30h	30h
Character	0	2	0	0	0	2	0	1	1	1	9	9	1	2	0	0

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	44h	4Ch	3Ah	*1	*3	*5	*7	03h
Character		V	D	L	:	*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

## 2.45 CLAMP POS.

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	4Ch	54h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	L	T	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0				1				2				253				254				255			
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	34h	32h	35h	35h	35h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	4	2	5	5	5	5	5

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	4Ch	54h	3Ah	*1	*3	*5	03h
Character		V	L	T	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

## 2.46 KEYSTONE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	4Bh	53h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	O	K	S	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-127			-126			-125			+125			+126			+127		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	32h	32h	35h	33h	32h	35h	34h
Character	0	0	0	0	0	1	0	0	2	2	5	2	2	5	3	2	5	4

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Bh	53h	3Ah	*1	*3	*5	03h
Character		O	K	S	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.47 LINEARITY

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	4Ch	49h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	L	I	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-127			-126			-125			+125			+126			+127		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	32h	32h	35h	33h	32h	35h	34h
Character	0	0	0	0	0	1	0	0	2	2	5	2	2	5	3	2	5	4

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	4Ch	49h	3Ah	*1	*3	*5	03h
Character		V	L	I	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.48 LANGUAGE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	4Ch	47h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	O	L	G	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	English			German			French		
Hexadecimal	45h	4Eh	47h	44h	45h	55h	46h	52h	41h
Character	E	N	G	D	E	U	F	R	A
	Spanish			Italian			Japanese		
Hexadecimal	45h	53h	50h	49h	54h	4Ch			
Character	E	S	P	I	T	L	J	P	N
	Chinese			Russian			Korean		
Hexadecimal	43h	48h	49h	52h	55h	53h	4Bh	4Fh	52h
Character	C	H	I	R	U	S	K	O	R

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	4Ch	47h	3Ah	*1	*3	*5	03h
Character		O	L	G	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	○	○	○	×	○	○

## 2.49 SYSTEM

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	52h	46h	3Ah	*1	03h
Character		A	D	Z	Z	;	O	R	F	:	*2	

### ■ Parameters (\*1, \*2)

	RGB			YPBPR/YCBCR			AUTO			RGB-480P		
Hexadecimal	30h			31h			32h			33h		
Character	0			1			2			3		

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	52h	46h	3Ah	*1	03h
Character		O	R	F	:	*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.50 BLANKING UPPER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	44h	42h	55h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	D	B	U	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			381			382			383		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	33h	38h	31h	33h	38h	32h	33h	38h	33h
Character	0	0	0	0	0	1	0	0	2	3	8	1	3	8	2	3	8	3

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	42h	55h	3Ah	*1	*3	*5	03h
Character		D	B	U	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.51 BLANKING LOWER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	44h	42h	42h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	D	B	B	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			381			382			383		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	33h	38h	31h	33h	38h	32h	33h	38h	33h
Character	0	0	0	0	0	1	0	0	2	3	8	1	3	8	2	3	8	3

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	42h	42h	3Ah	*1	*3	*5	03h
Character		D	B	B	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.52 BLANKING RIGHT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	44h	42h	52h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	D	B	R	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			509			510			511		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	35h	30h	39h	35h	31h	30h	35h	31h	31h
Character	0	0	0	0	0	1	0	0	2	5	0	9	5	1	0	5	1	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	42h	52h	3Ah	*1	*3	*5	03h
Character		D	B	R	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.53 BLANKING LEFT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	44h	42h	4Ch	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	D	B	L	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			509			510			511		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	35h	30h	39h	35h	31h	30h	35h	31h	31h
Character	0	0	0	0	0	1	0	0	2	5	0	9	5	1	0	5	1	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	44h	42h	4Ch	3Ah	*1	*3	*5	03h
Character		D	B	L	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.54 RASTER POSITION H

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	52h	48h	3Ah	*1	*3	*5	*7	03h
Character		A	D	Z	Z	;	V	R	H	:	*2	*4	*6	*8	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	-1				0				+1				+2			
Hexadecimal	34h	39h	39h	39h	35h	30h	30h	30h	35h	30h	30h	31h	35h	30h	30h	32h
Character	4	9	9	9	5	0	0	0	5	0	0	1	5	0	0	2

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	52h	48h	3Ah	*1	*3	*5	03h
Character		V	R	H	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.55 RASTER POSITION V

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	52h	56h	3Ah	*1	*3	*5	*7	03h
Character		A	D	Z	Z	;	V	R	V	:	*2	*4	*6	*8	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	-1				0				+1				+2			
Hexadecimal	34h	39h	39h	39h	35h	30h	30h	30h	35h	30h	30h	31h	35h	30h	30h	32h
Character	4	9	9	9	5	0	0	0	5	0	0	1	5	0	0	2

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	52h	56h	3Ah	*1	*3	*5	03h
Character		V	R	V	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	×	○	○

## 2.56 CONTRAST MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	56h	43h	52h	3Ah	*1	*3	*5	03h
Character		A	D	Z	Z	;	V	C	R	:	*2	*4	*6	

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	NORMAL	HIGH
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	56h	43h	52h	3Ah	*1	*3	*5	03h
Character		V	C	R	:	*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	○	○	×	○	○

## 2.57 Set Date

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	54h	53h	44h	3Ah	*y1	*y2	*y3	*y4	*m1	*m2	*d1	*d2	*w	03h
Character		A	D	Z	Z	;	T	S	D	:										

### ■ Parameters

\*y1 - \*y4: Year (4 digits)

\*m1, \*m2: Month (2 digits)

\*d1, \*d2: Day (2 digits)

\*w: Day of the week (Mon = 1, Tue = 2, Wed = 3, Thu = 4, Fri = 5, Sat = 6, Sun = 7)

Set it by UTC (Coordinated Universal Time).

Example: Thursday, June 29, 2006

	*y1	*y2	*y3	*y4	*m1	*m2	*d1	*d2	*w
Hexadecimal	32h	30h	30h	36h	30h	36h	32h	39h	34h
Character	2	0	0	6	0	6	2	9	4

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	54h	53h	44h	3Ah	*y1	*y2	*y3	*y4	*m1	*m2	*d1	*d2	*w	03h
Character		T	S	D	:										

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	○	○	○	×	○	○

## 2.58 Set Time

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	54h	53h	54h	3Ah	*h1	*h2	*m1	*m2	*s1	*s2	03h
Character		A	D	Z	Z	;	T	S	T	:							

### ■ Parameters

\*h1, \*h2: Hour (2 digits)

\*m1, \*m2 : Minute (2 digits)

\*s1, \*s2 : Second (2 digits)

Set it by UTC (Coordinated Universal Time).

Example: 3 seconds at 3:45 p.m.

	*h1	*h2	*m1	*m2	*s1	*s2
Hexadecimal	31h	35h	34h	35h	30h	33h
Character	1	5	4	5	0	3

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	54h	53h	54h	3Ah	*h1	*h2	*m1	*m2	*s1	*s2	03h
Character		T	S	T	:							

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	○	○	○	×	○	○

## 2.59 Query Power

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	50h	57h	03h
Character		A	D	Z	Z	;	Q	P	W	

### ■ Response (Callback)

OFF

Hexadecimal	02h	30h	30h	31h	03h
Character		0	0	0	

ON

Hexadecimal	02h	30h	30h	31h	03h
Character		0	0	1	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

## 2.60 Query FREEZE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	46h	5Ah	03h
Character		A	D	Z	Z	;	Q	F	Z	

### ■ Response (Callback)

OFF

Hexadecimal	02h	31h	03h
Character		0	

ON

Hexadecimal	02h	31h	03h
Character		1	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.61 Query SHUTTER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	48h	03h
Character		A	D	Z	Z	;	Q	S	H	

### ■ Response (Callback)

OFF

Hexadecimal	02h	31h	03h
Character		0	

ON

Hexadecimal	02h	31h	03h
Character		1	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.62 Query Input Select

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h			03h
Character		A	D	Z	Z	;	Q	I	N	

### ■ Response (Callback)

#### RGB1

Hexadecimal	02h	52h	47h	31h	03h
Character		R	G	1	

#### RGB2

Hexadecimal	02h	52h	47h	32h	03h
Character		R	G	2	

#### VIDEO

Hexadecimal	02h	56h	49h	44h	03h
Character		V	I	D	

#### S- VIDEO

Hexadecimal	02h	53h	56h	44h	03h
Character		S	V	D	

#### DVI

Hexadecimal	02h	44h	56h	49h	03h
Character		D	V	I	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.63 Query TEST PATTERN

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	53h	03h
Character		A	D	Z	Z	;	Q	T	S	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	03h
Character		*2	*4	

### ■ Parameters (\*1, \*2, \*3, \*4)

	OFF		White		Black		Flag		Window		Focus		Colorbar	
Hexadecimal	30h	30h	30h	31h	30h	32h	30h	33h	30h	35h	30h	37h	30h	38h
Character	0	0	0	1	0	2	0	3	0	5	0	7	0	8

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.64 Query ON SCREEN

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Fh	53h	03h
Character		A	D	Z	Z	;	Q	O	S	

### ■ Response (Callback)

#### OSD OFF

Hexadecimal	02h	31h	03h
Character		0	

#### OSD ON

Hexadecimal	02h	31h	03h
Character		1	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.65 Query PICTURE MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	50h	4Dh	03h
Character		A	D	Z	Z	;	Q	P	M	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	DYNAMIC			GRAPHIC			STANDARD			CINEMA			NATURAL		
Hexadecimal	44h	59h	4Eh	47h	52h	41h	53h	54h	44h	43h	49h	4Eh	4Eh	41h	54h
Character	D	Y	N	G	R	A	S	T	D	C	I	N	N	A	T

## 2.66 Query COLOR

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	56h	43h	03h
Character		A	D	Z	Z	;	Q	V	C	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			98			99			100		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	39h	38h	30h	39h	39h	31h	30h	30h
Character	0	0	0	0	0	1	0	0	2	0	9	8	0	9	9	1	0	0

## 2.67 Query TINT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	56h	54h	03h
Character		A	D	Z	Z	;	Q	V	T	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			58			59			60		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	35h	38h	30h	35h	39h	30h	36h	30h
Character	0	0	0	0	0	1	0	0	2	0	5	8	0	5	9	0	6	0

## 2.68 Query COLOR TEMP.

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	45h	03h
Character		A	D	Z	Z	;	Q	T	E	

### ■ Response (Callback)

DEFAULT

Hexadecimal	02h	31h	30h	03h
Character		1	0	

USER

Hexadecimal	02h	34h	03h
Character		4	

MIDDLE

Hexadecimal	02h	31h	03h
Character		1	

HIGH

Hexadecimal	02h	32h	03h
Character		2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.69 Query W-BAL LOW R

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Fh	52h	03h
Character		A	D	Z	Z	;	Q	O	R	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.70 Query W-BAL LOW G

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Fh	47h	03h
Character		A	D	Z	Z	;	Q	O	G	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.71 Query W-BAL LOW B

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Fh	42h	03h
Character		A	D	Z	Z	;	Q	O	B	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.72 Query W-BAL HIGH R

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	48h	52h	03h
Character		A	D	Z	Z	;	Q	H	R	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.73 Query W-BAL HIGH G

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	48h	47h	03h
Character		A	D	Z	Z	;	Q	H	G	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5



## 2.74 Query W-BAL HIGH B

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	48h	42h	03h
Character		A	D	Z	Z	;	Q	H	B	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.75 Query CONTRAST

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	56h	52h	03h
Character		A	D	Z	Z	;	Q	V	R	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			61			62			63		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	36h	31h	30h	36h	32h	30h	36h	33h
Character	0	0	0	0	0	1	0	0	2	0	6	1	0	6	2	0	6	3

## 2.76 Query BRIGHT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	56h	42h	03h
Character		A	D	Z	Z	;	Q	V	B	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			61			62			63		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	36h	31h	30h	36h	32h	30h	36h	33h
Character	0	0	0	0	0	1	0	0	2	0	6	1	0	6	2	0	6	3

## 2.77 Query SHARPNESS

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	56h	53h	03h
Character		A	D	Z	Z	;	Q	V	S	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			13			14			15		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	31h	33h	30h	31h	34h	30h	31h	35h
Character	0	0	0	0	0	1	0	0	2	0	1	3	0	1	4	0	1	5

## 2.78 Query NR

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Eh	53h	03h
Character		A	D	Z	Z	;	Q	N	S	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2)

	OFF	ON or 1	2	3
Hexadecimal	30h	31h	32h	33h
Character	0	1	2	3

## 2.79 Query AI

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	41h	49h	03h
Character		A	D	Z	Z	;	Q	A	I	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2)

	OFF	ON
Hexadecimal	30h	31h
Character	0	1

## 2.80 Query TV-SYSTEM

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	47h	03h
Character		A	D	Z	Z	;	Q	S	G	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	AUTO1			AUTO2			NTSC			NTSC4.43			PAL		
Hexadecimal	41h	54h	31h	41h	54h	32h	4Eh	54h	53h	4Eh	34h	34h	50h	41h	4Ch
Character	A	T	1	A	T	2	N	T	S	N	4	4	P	A	L
	NTSC4.43			PAL			PAL-M			PAL60					
Hexadecimal	50h	41h	4Dh	50h	41h	4Eh	53h	45h	43h	50h	36h	30h			
Character	P	A	M	P	A	N	S	E	C	P	6	0			

## 2.81 Query POSITION H

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	48h	3Ah	31h	03h
Character		A	D	Z	Z	;	Q	T	H	:	1	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	0				1				9998				9999			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

## 2.82 Query POSITION V

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	56h	3Ah	31h	03h
Character		A	D	Z	Z	;	Q	T	V	:	1	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	0				1				9998				9999			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

## 2.83 Query RASTER POSITION H

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h		48h	3Ah	31h	03h
Character		A	D	Z	Z	;	Q	R	H	:	1	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	-1				0				+1				+2			
Hexadecimal	34h	39h	39h	39h	35h	30h	30h	30h	35h	30h	30h	31h	35h	30h	30h	32h
Character	4	9	9	9	5	0	0	0	5	0	0	1	5	0	0	2

## 2.84 Query RASTER POSITION V

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h				3Ah	31h	03h
Character		A	D	Z	Z	;	Q	R	V	:	1		

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	-1				0				+1				+2			
Hexadecimal	34h	39h	39h	39h	35h	30h	30h	30h	35h	30h	30h	31h	35h	30h	30h	32h
Character	4	9	9	9	5	0	0	0	5	0	0	1	5	0	0	2

## 2.85 Query ASPECT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	45h	03h
Character		A	D	Z	Z	;	Q	S	E	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2)

	AUTO		4:3		16:9		S4:3		HV FIT	
Hexadecimal	30h		31h		32h		33h		36h	
Character	0		1		2		3		6	

## 2.86 Query ZOOM H

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	5Ah	48h	03h
Character		A	D	Z	Z	;	Q	Z	H	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			997			998			999		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	39h	39h	37h	39h	39h	38h	39h	39h	39h
Character	0	0	0	0	0	1	0	0	2	9	9	7	9	9	8	9	9	9

## 2.87 Query ZOOM V

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	5Ah	56h	03h
Character		A	D	Z	Z	;	Q	Z	V	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			997			998			999		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	39h	39h	37h	39h	39h	38h	39h	39h	39h
Character	0	0	0	0	0	1	0	0	2	9	9	7	9	9	8	9	9	9

## 2.88 Query CLOCK PHASE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	43h	50h	03h
Character		A	D	Z	Z	;	Q	C	P	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YPbPr1	YPbPr2	DVI
×	×	○	○	○	○	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			29			30			31		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	30h	32h	39h	30h	33h	30h	30h	33h	31h
Character	0	0	0	0	0	1	0	0	2	0	2	9	0	3	0	0	3	1

## 2.89 Query TOTAL DOTS / INPUT RESOLUTION

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	44h	03h
Character		A	D	Z	Z	;	Q	T	D	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YPbPr1	YPbPr2	DVI
×	×	○	○	×	×	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	0			1			9998			9999		
Hexadecimal	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h
Character	0	0	0	0	0	0	1	9	9	9	8	9

## 2.90 Query DISPLAY DOTS / INPUT RESOLUTION

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	44h	44h	03h
Character		A	D	Z	Z	;	Q	D	D	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	0				1				9998				9999			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

## 2.91 Query TOTAL LINES / INPUT RESOLUTION

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	4Ch	03h
Character		A	D	Z	Z	;	Q	T	L	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	0				1				9998				9999			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

## 2.92 Query DISPLAY LINES / INPUT RESOLUTION

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	44h	4Ch	03h
Character		A	D	Z	Z	;	Q	D	L	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

	0				1				9998				9999			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

### 2.93 Query BLANKING UPPER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	55h	03h
Character		A	D	Z	Z	;	Q	L	U	

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

#### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

### 2.94 Query BLANKING LOWER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	42h	03h
Character		A	D	Z	Z	;	Q	L	B	

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

#### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

### 2.95 Query BLANKING RIGHT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	4Ch	03h
Character		A	D	Z	Z	;	Q	L	L	

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

#### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0			1			2			253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.96 Query BLANKING LEFT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	52h	03h
Character		A	D	Z	Z	;	Q	L	R	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0					1		2		253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.97 Query CONTRAST MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	43h	52h	03h
Character		A	D	Z	Z	;	Q	C	R	

### ■ Response (Callback)

In the period when the command can be accepted

NORMAL

Hexadecimal	02h	30h	03h
Character		0	

HIGH

Hexadecimal	02h	31h	03h
Character		1	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	○	○	○	○

## 2.98 Query CLAMP POS.

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	54h	03h
Character		A	D	Z	Z	;	Q	L	T	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○
VIDEO	S-VIDEO	RGB1	RGB2	YP <sub>B</sub> Pr1	YP <sub>B</sub> Pr2	DVI
×	×	○	○	×	×	×

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	0					1		2		253			254			255		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	33h	32h	35h	34h	32h	35h	35h
Character	0	0	0	0	0	1	0	0	2	2	5	3	2	5	4	2	5	5

## 2.99 Query KEYSTONE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Bh	53h	03h
Character		A	D	Z	Z	;	Q	K	S	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-127					-126		-125		+125			+126			+127		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	32h	32h	35h	33h	32h	35h	34h
Character	0	0	0	0	0	1	0	0	2	2	5	2	2	5	3	2	5	4

## 2.100 Query LINEARITY

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	49h	03h
Character		A	D	Z	Z	;	Q	L	I	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	-127			-126			-125			+125			+126			+127		
Hexadecimal	30h	30h	30h	30h	30h	31h	30h	30h	32h	32h	35h	32h	32h	35h	33h	32h	35h	34h
Character	0	0	0	0	0	1	0	0	2	2	5	2	2	5	3	2	5	4

## 2.101 Query LANGUAGE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	47h	03h
Character		A	D	Z	Z	;	Q	L	G	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	03h
Character		*2	*4	*6	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6)

	English			German			French		
Hexadecimal	45h	4Eh	47h	44h	45h	55h	46h	52h	41h
Character	E	N	G	D	E	U	F	R	A
	Spanish			Italian			Japanese		
Hexadecimal	45h	53h	50h	49h	54h	4Ch			
Character	E	S	P	I	T	L	J	P	N
	Chinese			Russian			Korean		
Hexadecimal	43h	48h	49h	52h	55h	53h	4Bh	4Fh	52h
Character	C	H	I	R	U	S	K	O	R

## 2.102 Query Installation (FRONT/REAR & DESK/CEILING)

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	50h	03h
Character		A	D	Z	Z	;	Q	S	P	

### ■ Response (Callback)

FRONT/DESK

Hexadecimal	02h	30h	03h
Character		0	

REAR/DESK

Hexadecimal	02h	34h	03h
Character		1	

FRONT/CEILING

Hexadecimal	02h	31h	03h
Character		2	

REAR/CEILING

Hexadecimal	02h	32h	03h
Character		3	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○



## 2.103 Query SET RUNTIME

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	54h	03h
Character		A	D	Z	Z	;	Q	S	T	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	*9	03h
Character		*2	*4	*6	*8	*10	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8, \*9, \*10)

	0					1					99998					99999				
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	39h	38h	39h	39h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	0	1	9	9	9	9	8	9	9	9	9	9	9

## 2.104 Query LAMP1 ON

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	24h	4Ch	3Ah	31h	03h
Character		A	D	Z	Z	;	Q	\$	L	:	1	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

When the lamp is Normal type

Answered time = (Lamp ON time in HIGH) + ((Lamp ON time in LOW) × 3 ÷ 4)

When the lamp is Long-life type

Answered time = Lamp ON time

	0 h				1 h				9998 h				9999 h			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

## 2.105 Query LAMP2 ON

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	24h	4Ch	3Ah	32h	03h
Character		A	D	Z	Z	;	Q	\$	L	:	2	

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	*3	*5	*7	03h
Character		*2	*4	*6	*8	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8)

When the lamp is Normal type

Answered time = (Lamp ON time in HIGH) + ((Lamp ON time in LOW) × 3 ÷ 4)

When the lamp is Long-life type

Answered time = Lamp ON time

	0 h				1 h				9998 h				9999 h			
Hexadecimal	30h	30h	30h	30h	30h	30h	30h	31h	39h	39h	39h	38h	39h	39h	39h	39h
Character	0	0	0	0	0	0	0	1	9	9	9	8	9	9	9	9

## 2.106 Query LAMP SELECT

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	4Ch	03h
Character		A	D	Z	Z	;	Q	S	L	

### ■ Response (Callback)

#### DUAL

Hexadecimal	02h	30h	03h
Character		0	

#### SINGLE

Hexadecimal	02h	31h	03h
Character		1	

#### LAMP1

Hexadecimal	02h	31h	03h
Character		2	

#### LAMP2

Hexadecimal	02h	33h	03h
Character		3	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.107 Query Lamp Status

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h		53h	03h
Character		A	D	Z	Z	;	Q	\$	S	

### ■ Response (Callback)

#### Lamp OFF

Hexadecimal	02h	30h	03h
Character		0	

#### In turning ON

Hexadecimal	02h	31h	03h
Character		1	

#### Lamp ON

Hexadecimal	02h	31h	03h
Character		2	

#### In turning OFF (Cooling)

Hexadecimal	02h	33h	03h
Character		3	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.108 Query LAMP POWER

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	4Ch	50h	03h
Character		A	D	Z	Z	;	Q	L	P	

### ■ Response (Callback)

#### When the lamp is Normal type and HIGH setting

Hexadecimal	02h	30h	03h
Character		0	

#### When the lamp is Normal type and LOW setting

Hexadecimal	02h	32h	03h
Character		1	

#### When the lamp is Long-life type

Hexadecimal	02h	32h	03h
Character		2	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.109 Query VPS SYSTEM

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	56h	59h	03h
Character		A	D	Z	Z	;	Q	V	Y	

### ■ Response (Callback)

#### MASTER

Hexadecimal	02h	30h	03h
Character		0	

#### SLAVE

Hexadecimal	02h	32h	03h
Character		1	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.110 Query Temperature

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	54h	4Dh	3Ah	*1	03h
Character		A	D	Z	Z	;	Q	T	M	:	*2	

### ■ Parameters (\*1, \*2)

	Intake air temperature			Lamp surroundings temperature			Optical module temperature		
Hexadecimal	30h			31h			32h		
Character	0			1			2		

### ■ Response (Callback)

#### For -20 °C

		Celsius						Fahrenheit				
Hexadecimal	02h	2Dh	30h	32h	30h	2Fh	2Dh	30h	30h	34h	03h	
Character		-	0	2	0	/	-	0	0	4		

#### For 120 °C

		Celsius						Fahrenheit				
Hexadecimal	02h	30h	31h	32h	30h	2Fh	30h	32h	34h	38h	03h	
Character		0	1	2	0	/	0	2	4	8		

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.111 Query FAN CONTROL1

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	46h	4Dh	03h
Character		A	D	Z	Z	;	Q	F	M	

### ■ Response (Callback)

#### NORMAL

Hexadecimal	02h	30h	03h
Character		0	

#### HIGHLAND

Hexadecimal	02h	32h	03h
Character		1	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.112 Query FUNC1

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	46h	43h	03h
Character		A	D	Z	Z	;	Q	F	C	

### ■ Response (Callback)

#### LAMP POWER

Hexadecimal	02h	31h	03h
Character		1	

#### ASPECT

Hexadecimal	02h	32h	03h
Character		2	

#### SUB MEMORY LIST

Hexadecimal	02h	33h	03h
Character		3	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

## 2.113 Query Usage Condition of Sub Memory

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	42h	03h
Character		A	D	Z	Z	;	Q	S	B	

### ■ Response (Callback)

#### In the period when the command can be accepted

Hexadecimal	02h	*1	*3	03h
Character		*2	*4	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	○	○	○	○

### ■ Parameters (\*1, \*2, \*3, \*4)

Calls back ER401 when the sub memory is not used.

	1		2		3		4		5		6		7		8	
Hexadecimal	30h	31h	30h	32h	30h	33h	30h	34h	30h	35h	30h	36h	30h	37h	30h	38h
Character	0	1	0	2	0	3	0	4	0	5	0	6	0	7	0	8

## 2.114 Query Date

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	47h	44h	03h
Character		A	D	Z	Z	;	Q	G	D	

### ■ Response (Callback)

Hexadecimal	02h	*y1	*y2	*y3	*y4	*m1	*m2	*d1	*d2	*w	03h
Character											

### ■ Parameters

\*y1 - \*y4: Year (4 digits)

\*m1, \*m2: Month (2 digits)

\*d1, \*d2: Day (2 digits)

\*w: Day of the week (Mon = 1, Tue = 2, Wed = 3, Thu = 4, Fri = 5, Sat = 6, Sun = 7)

Set it by UTC (Coordinated Universal Time).

Example: Thursday, June 29, 2006

	*y1	*y2	*y3	*y4	*m1	*m2	*d1	*d2	*w
Hexadecimal	32h	30h	30h	36h	30h	36h	32h	39h	34h
Character	2	0	0	6	0	6	2	9	4

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

### 2.115 Query Time

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	47h	54h	03h
Character		A	D	Z	Z	;	Q	G	T	

#### ■ Response (Callback)

Hexadecimal	02h	*h1	*h2	*m1	*m2	*s1	*s2	03h
Character								

#### ■ Parameters

\*h1, \*h2: Hour (2 digits)

\*m1, \*m2 : Minute (2 digits)

\*s1, \*s2 : Second (2 digits)

Set it by UTC (Coordinated Universal Time).

Example: 3 seconds at 3:45 p.m.

	*h1	*h2	*m1	*m2	*s1	*s2
Hexadecimal	31h	35h	34h	35h	30h	33h
Character	1	5	4	5	0	3

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2.116 Query Model (Series) Name

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	49h	44h	03h
Character		A	D	Z	Z	;	Q	I	D	

#### ■ Response (Callback)

In the period when the command can be accepted

PT-D5600\* / PT-D5600L\*

Hexadecimal	02h	44h	35h	36h	30h	30h	03h
Character		D	5	6	0	0	

PT-DW5000 / PT-DW5000L\*

Hexadecimal	02h	44h	57h	35h	30h	30h	30h	03h
Character		D	W	5	0	0	0	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2.117 Query Lamp ON/OFF

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	h	h	03h
Character		A	D	Z	Z	;	Q	L	S	

#### ■ Response (Callback)

LAMP1 OFF, LAMP2 OFF

Hexadecimal	02h	30h	03h
Character		0	

LAMP1 ON, LAMP2 OFF

Hexadecimal	02h	31h	03h
Character		1	

LAMP1 OFF, LAMP2 ON

Hexadecimal	02h	32h	03h
Character		2	

LAMP1 ON, LAMP2 ON

Hexadecimal	02h	33h	03h
Character		3	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 2.118 Query PICTURE SYSTEM

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	52h	46h	03h
Character		A	D	Z	Z	;	Q	R	F	

### ■ Response (Callback)

#### RGB

Hexadecimal	02h	30h	03h
Character		0	

#### YPbPr/YCbCr

Hexadecimal	02h	31h	03h
Character		1	

#### AUTO

Hexadecimal	02h	32h	03h
Character		2	

#### RGB-480P

Hexadecimal	02h	33h	03h
Character		3	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	○	○	○	○

## 2.119 XGA MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	58h	47h	3Ah
Character		A	D	Z	Z	;	O	X	G	:
Hexadecimal	*1	03h								
Character	*2									

### ■ Parameters (\*1, \*2)

	XGA	WXGA
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	58h	47h	3Ah	*1	03h
Character		O	X	G	:	*2	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	×	×	×	○

## 2.120 SXGA MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	4Fh	53h	58h	3Ah	*1	03h
Character		A	D	Z	Z	;	O	S	X	:	*2	

### ■ Parameters (\*1, \*2)

	SXGA	SXGA+
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	4Fh	53h	58h	3Ah	*1	03h
Character		O	S	X	:	*2	

#### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
×	×	×	×	×	×	○

## 2.121 Query XGA MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	58h	47h	03h
Character		A	D	Z	Z	;	Q	X	G	

### ■ Parameters (\*1, \*2)

	XGA	WXGA
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	×	×	×	○

## 2.122 Query SXGA MODE

Hexadecimal	02h	41h	44h	5Ah	5Ah	3Bh	51h	53h	58h	03h
Character		A	D	Z	Z	;	Q	S	X	

### ■ Parameters (\*1, \*2)

	SXGA	SXGA+
Hexadecimal	30h	31h
Character	0	1

### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*1	03h
Character		*2	

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	×	×	×	×	○

### 3 Extended Control Command

Start (STX)	ID	Command	Parameters	End (ETX)
1 byte	1 byte	1 byte or 2 bytes	Undefined length	1 byte

#### ID of the extended control command

ID	Hexadecimal (1 byte)	ID	Hexadecimal (1 byte)	ID	Hexadecimal (1 byte)	ID	Hexadecimal (1 byte)
All	00	ID23	17	ID46	2E	Group E	84
ID1	01	ID24	18	ID47	2F	Group F	85
ID2	02	ID25	19	ID48	30	Group G	86
ID3	03	ID26	1A	ID49	31	Group H	87
ID4	04	ID27	1B	ID50	32	Group I	88
ID5	05	ID28	1C	ID51	33	Group J	89
ID6	06	ID29	1D	ID52	34	Group K	8A
ID7	07	ID30	1E	ID53	35	Group L	8B
ID8	08	ID31	1F	ID54	36	Group M	8C
ID9	09	ID32	20	ID55	37	Group N	8D
ID10	0A	ID33	21	ID56	38	Group O	8E
ID11	0B	ID34	22	ID57	39	Group P	8F
ID12	0C	ID35	23	ID58	3A	Group Q	90
ID13	0D	ID36	24	ID59	3B	Group R	91
ID14	0E	ID37	25	ID60	3C	Group S	92
ID15	0F	ID38	26	ID61	3D	Group T	93
ID16	10	ID39	27	ID62	3E	Group U	94
ID17	11	ID40	28	ID63	3F	Group V	95
ID18	12	ID41	29	ID64	40	Group W	96
ID19	13	ID42	2A	Group A	80	Group X	97
ID20	14	ID43	2B	Group B	81	Group Y	98
ID21	15	ID44	2C	Group C	82	Group Z	99
ID22	16	ID45	2D	Group D	83		

#### 3.1 Lens Control

Hexadecimal	02h	*1	B1h	7Ch	*2	*3	*4	03h
Remarks	STX	ID	Command	Parameters				ETX

##### ■ Parameters (\*2)

	LENS SHIFT H	LENS SHIFT V	LENS FOCUS	LENS ZOOM
Hexadecimal	00h	01h	02h	03h

##### ■ Parameters (\*3)

	Slowly	Normal	Fast
Hexadecimal	00h	01h	02h

##### ■ Parameters (\*4)

	Right / Up / Forward / In	Left / Down / Backward / Out
Hexadecimal	00h	01h

##### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*5	B3h	7Ch	*2	*3	*4	03h
	STX	ID	Callback	Parameters				ETX

In the period when the command cannot be accepted

Hexadecimal	02h	*5	FFh	03h
	STX	ID	Error	ETX

##### Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	×	○	×	○	○	○



### 3.2 SELF CHECK Information

Hexadecimal	02h	*1	FEh	03h
Remarks	STX	ID	Command	ETX

#### ■ Response (Callback)

In the period when the command can be accepted

Hexadecimal	02h	*5	FEh	*2	*3	*4	*5	*6	*7	*8	*9	03h
	STX	ID		Parameters 1				Parameters 2				ETX

Acceptability

SECURITY	STNDBY	NO SIGNAL	SHUTTER	FREEZE	TEST PATTERN	REMOTE2
○	○	○	○	○	○	○

#### ■ Parameters 1 (\*2, \*3, \*4, \*5)

	*2							*3							*4							*5						
Bit	31						24	23						16	15						8	7						0

Bit	Name	Description	Condition of Clear Bit
bit31	Main CPU error	The main CPU circuit is abnormal. It is a breakdown when not recovering even if the power is turned on again.	Power ON
bit30	Fan error	The fan and/or fan drive circuit is abnormal. It is a breakdown when not recovering even if the power is turned on again.	Power ON
bit29	Optical module temperature error	Abnormally high temperature is detected inside this projector and the shutdown has occurred. •The ventilation holes may be closed. •The ambient temperature in the place of use may be too high. •The air filter may accumulate dust.	Power ON
bit28	Intake air temperature error		Power ON
bit27	Lamp surroundings temperature error		Power ON
bit26	For extension	The value is undefined.	—
bit25	Lamp 2 ON time error (Shutdown)	The lamp ON time exceeds specified cumulative usage time, and becomes a period when the lamp unit is replaced.	Lamp 2 reset
bit24	Lamp 1 ON time error (Shutdown)		Lamp 1 reset
bit23	Lamp 2 ON failure	It fails in the turning ON the lamp. • The power may have been turned on straight away after it was turned off.	Lamp 2 ON success, or Power ON
bit22	Lamp 1 ON failure		Lamp 1 ON success, or Power ON
bit21	Aperture error	Not used in this projector	—
bit20	Shutter error	It fails in the operation of the shutter. It is a breakdown when not recovering even if the power is turned on again.	Power ON
bit19	Optical module temperature sensor disconnected	The thermosensor in this projector has breaking of wire, or connector A10 is disconnected.	MAIN POWER ON
bit18	Intake air temperature sensor disconnected	The intake air thermosensor has breaking of wire, or connector A9 is disconnected.	MAIN POWER ON
bit17	Lamp surroundings temperature sensor disconnected	The lamp surroundings thermosensor has breaking of wire, or connector A11 is disconnected.	MAIN POWER ON
bit16	Warning of battery for clock	It is necessary to replace the battery (CR2032) on the battery holder B2501.	Battery replacement, or MAIN POWER ON

Bit	Name	Description	Condition of Clear Bit
bit15	Warning of optical module low temperature	The ambient temperature in the place of use may be 0 °C or lower. If the temperature inside this projector does not rise within 5 minutes after the turning on the lamp, the shutdown occurs.	<ul style="list-style-type: none"> <li>• Becomes higher than the warning release temperature during power-on.</li> <li>• Power ON</li> </ul>
bit14	Warning of optical module high temperature	The temperature inside this projector has become high. If the temperature rises any further, the shutdown occurs. <ul style="list-style-type: none"> <li>• The ventilation holes may be closed.</li> <li>• The ambient temperature in the place of use may be too high.</li> <li>• The air filter may accumulate dust.</li> </ul> The value is undefined.	<ul style="list-style-type: none"> <li>• Becomes lower than the warning release temperature during power-on.</li> <li>• Power ON</li> </ul>
bit13	Warning of intake air high temperature		
bit12	Warning of exhaust air or lamp surroundings high temperature		
bit11	For test	The value is undefined.	MAIN POWER ON
bit10	Warning of air filter	The air filter may accumulate dust.	MAIN POWER ON or clean the air filter
bit09	For extension	The value is undefined.	—
bit08	For extension	The value is undefined.	—
bit07	Lamp 2 ON time error	It becomes a period when the lamp unit is replaced. Prepare a new lamp unit. The shutdown will occur within 200 hours.	Lamp 2 reset
bit06	Lamp 1 ON time error		Lamp 1 reset
bit05	For extension	The value is undefined.	—
bit04	For extension	The value is undefined.	—
bit03	Airflow sensor disconnected	The airflow sensor has breaking of wire, or connector A12 is disconnected.	MAIN POWER ON
bit02	Color wheel rotation error	The color wheel and/or color wheel drive circuit is abnormal. It is a breakdown when not recovering even if the power is turned on again.	Power ON
bit01	For extension	The value is undefined.	—
bit00	For extension	The value is undefined.	—

■ Parameters 2 (\*6, \*7, \*8, \*9)

For extension, the value is undefined.